

S
419
A2

JAN 4 1949

AGRICULTURAL HISTORY



Volume 22

Number 4

October 1948

Man's Place in the Sun	<i>Jane Carter</i> 209
Europe's Recurrent Land Problem	<i>V. Alton Moody</i> 220
Agriculture in the Undrained Basin of Asia	
	<i>George W. Anderson</i> 233
Railroad Service to Virginia Farmers, 1828-1860	
	<i>Charles W. Turner</i> 239
Advancing Trends in Southern Agriculture, 1840-1860	
	<i>James C. Bonner</i> 248
The Wyoming Stock Growers' Association: Its Years of Temporary Decline, 1886-1890	
	<i>W. Turrentine Jackson</i> 260
News Notes and Comments	270

Published Quarterly

by

THE AGRICULTURAL HISTORY SOCIETY

THE AGRICULTURAL HISTORY SOCIETY

Editorial and Business Office

ROOM 3907, SOUTH AGRICULTURE BUILDING
U. S. BUREAU OF AGRICULTURAL ECONOMICS
WASHINGTON 25, D. C.

Officers and Executive Committee

President: John D. Hicks, University of California, Berkeley 4, California
Vice President: Paul W. Gates, Cornell University, Ithaca, New York
Secretary-Treasurer: Charles A. Burmeister, United States Department of Agriculture
Charles J. Brand, 834 Investment Building, Washington 5, D. C.
Robert G. Dunbar, Montana State College, Bozeman, Montana
Weymouth T. Jordan, Alabama Polytechnic Institute, Auburn, Alabama
Frederick Merk, Harvard University, Cambridge 38, Massachusetts
Arthur G. Peterson, Office, Secretary of Defense, Washington 25, D. C.
Earle D. Ross, Iowa State College, Ames, Iowa

AGRICULTURAL HISTORY

The Quarterly Journal of the Agricultural History Society

Agricultural History is designed as a medium for the publication of research and documents pertaining to the history of agriculture in all its phases and as a clearinghouse for information of interest and value to workers in the field. Materials on the history of agriculture in all countries are included, and also materials on institutions, organizations, and sciences which have been factors in agricultural development. The Society is not responsible for the statements or opinions of contributors.

All members of the Agricultural History Society receive *Agricultural History*. The memberships are: Student, \$1.50 annually for bona fide students 18-25 years old; annual, \$4.00; contributing, \$10.00; life, \$100.00; joint membership with the Economic History Association, \$6.00; and joint membership with the Economic History Association and the Economic History Society (England), \$9.00. Single current numbers, \$1.25.

Editorial Board

Editor: Everett E. Edwards, United States Department of Agriculture
Lewis E. Atherton, University of Missouri, Columbia, Missouri
Kathleen Bruce, The Forest, State Farm Post Office, Virginia
Harry J. Carman, Columbia University, New York 27, New York
Robert G. Dunbar, Montana State College, Bozeman, Montana
Marco Antonio Durán, Escuela Nacional de Agricultura, República Mexico
V. C. Fowke, University of Saskatchewan, Saskatoon, Saskatchewan, Canada
G. E. Fussell, Ministry of Agriculture and Fisheries, London, England
Herbert A. Kellar, McCormick Historical Association, Chicago 11, Illinois
Fred Landon, University of Western Ontario, London, Ontario, Canada
Rodney C. Loehr, University of Minnesota, Minneapolis 14, Minnesota
O. C. Stine, United States Department of Agriculture
Nannie M. Tilley, East Texas State Teachers College, Commerce, Texas
Lazar Volin, United States Department of Agriculture

Agricultural History is published for the Agricultural History Society at the Waverly Press, Inc., Mount Royal and Guilford Avenues, Baltimore 2, Maryland.

Entered as second-class matter on October 12, 1928, at the post office of Baltimore, Maryland, under the Act of March 3, 1879.

MAN'S PLACE IN THE SUN

JANE CARTER

As recorded in *Genesis*, man's first ownership of land upon this earth was what is legally known as a conditional devise. Looking upon his handiwork and finding it good, God formed Adam from the dust, then endued him with incontestable lordship over it—provided that he till the soil and eat not of the Fruit of the Tree. Thus, by divine gift was provided the greatest necessity of human life, a home and sustenance.

Although the Garden reverted to divine sovereignty through Adam's defection, the chroniclers of the Old Testament continually reassure us that their Deity had not forgotten this prime need of mankind for space to call his own. The covenant given to Noah in the sign of the rainbow was renewed to Abraham in the "promised land" which has remained Judaism's polar star. While the Law as revealed to Moses contained such timeless provisions for the holding and treatment of land that its tenets are claimed by some to have been revived by the Pilgrim Fathers during their first years in America.

To quote from Rabbi Abraham A. Neuman, "Rooted in the land are the Biblical laws for relief from the curse of poverty, precepts to prevent land concentration in the hands of the few, provisions for a program of social justice. Even after the forcible separation of the Jewish people from their land, the skies and soil of Palestine, the rain and dew, the trees and fruit of the Holy Land have continued to be mirrored in the prayers and festive days of the Jewish religion to this day."

But the wellspring of western civilization taps many streams in addition to Biblical ones in relating man to the land, and although much that is prehistoric is open to controversy, certain convictions emerge from a study of the past. The first question might be: Did the inception of man's ownership of land come as an individual or as a group experience?

If we study primitive peoples within historical times we find that the most primitive may usually be classed as nomad hunters. In the Asiatic heartland where our first ancestors probably roamed, land was in the beginning abundant for

all. There was no need to either "own" or "defend" the trails of the deer and bison.

With population growths, however, different bands of people must eventually have established themselves as sole users of certain areas. This was true of the American Indians. Sir William Johnson, royal agent to the Mohawks reported in 1764: "Each Indian nation is well acquainted with its exact original boundaries; the same is again divided into due proportions for each tribe . . . neither do they ever infringe upon a neighbor's hunting ground."

Prehistoric hunting rights conveyed no idea of ownership "from the core of the earth to the sky" as conceived by modern man. One important step was necessary to bring this into being: tillage of the soil. Only with early man's tentative efforts to seed the earth and reap the harvest thereof came ownership in the sense of exclusive possession. In return for labor expended in clearing, draining, and cultivating the virgin land our primitive ancestors established the first recognized property rights. This right continued, however, only for as long as an individual remained true to his responsibility. Abandoned, the land reverted to nature and awaited a new owner.

For original agriculture was a shifting thing—from hunting to husbandry, then back again, countless times over. Sometimes arable land, without buildings and representing only a year's labor, would be abandoned because of soil exhaustion (especially in spots where the forest had been burned off rather than cleared) or pasturage would diminish through lack of rainfall. In all such cases, property rights were only temporary.

But as populations increased and the need for land grew, manure from nomadic herds was used to enrich and thus prolong the usefulness of the soil. Man's relation to the earth became ever more stable. Fallow years were arranged with no break in the continuity of ownership. So long as traces of the owner's labor were visible upon the land it was his; only he had a right to its enjoyment.

"As far as the axe, the scythe and the plough go" confirms an old Russian axiom. Through the centuries and in many countries labor put into

the earth conveyed ownership. "The sages declare a field belongs to him who first cleared away the timber and a deer to him who first wounded it," runs a Hindu saying. In Siberian forests the peasants who protected them from fire owned the timber. Clearing the forest conferred permanent property rights upon Russian, Javanese, Western European, and African.

Yet early property rights did not exclude certain common use of the land by tribal groups. Unenclosed pasturage and forest land fringed each settlement for the benefit of all, and this system, as we shall see, continued in England down to modern times.

In Russia, seizing a part of the holdings of the rich for the benefit of the poor took place for centuries whenever the increased pressures of the landless majority rose sufficiently against the landed minority. At first forced by bloody invasion of the great estates, this was later established by law, with a periodic subdivision of land giving to every villager a strip of each quality of field. In the rich earth of the Black Sea area these subdivisions were less frequent; in all parts of old Russia they operated upon petition of the landless. Only the families' homesteads remained permanent for building and experimentation with orchards and vines.

Attempts are sometimes made to prove racial patterns of settlement, but these seem very frail. Topographical and economic conditions are apparently the real moulds. In mountainous countries settlement tends toward the individual homestead snuggled into a small ravine or valley, such as the Norwegian *gaards*. In flat country like Denmark, we find *bys*, or villages. In India these patterns repeat themselves with individual homes in the Himalayan foothills and villages in the plain country. The German mark, or village, which swept over Europe in repeated invasion did so only because of its high suitability for defense where the land contours were mildly rolling.

In the same way, economic necessity may shape the manner in which labor is applied to the land without any essential change in the right of ownership. In Java, related households often work together to clear, irrigate, and harvest the rice fields, and the crop is divided according to the number in each family and the degree of assistance given. Yet ownership remains vested in the individual with perhaps restrictions that

he may sell only to another member of the community.

Thus little by little we find man becoming a husbandman, attached to the good earth and jealous of his rights concerning it. The ancient records are filled with proof. In *Ruth*, a man redeemed land by plucking off his shoe and giving it to a neighbor before witnesses. In *Deuteronomy*, landmarks are mentioned. But the Mosaic Code is probably the most complete.

And the land shall yield her fruit, and ye shall eat your fill, and dwell therein in safety.

The land shall not be sold forever: for the land is mine. . . .

And if a man sell a dwelling house in a walled city, then he may redeem it within a whole year after it is sold. . . .

But the field of the suburbs of their [Levite] cities may not be sold; for it is their perpetual possession.

In Chaldea, land was again the property of the gods, and mortals merely held tenure under their powerful protection. In a feudal system of quitrents like those cast off by our colonial ancestors, descriptions of holdings were registered on clay tablets and included all dikes and canals. Upon these the king based his tax surveys. The transfer of a deed was accompanied by ceremonies half-religious, half-magical. A basalt landmark of around 6500 B.C. warned any molester that the gods would punish by leprosy, loosing a tempest upon his fields, deserting him in battle, or a score of other retributions.

The records of early Greece are sparse concerning land, and the reason for this may well be understood in the following quotation from Gilbert Murray's *The Rise of the Greek Epic*.

It is a time, as Diodorus says, of 'constant war-paths and uprootings of peoples'. . . . For the fugitive settlers on the shores that were afterwards Ionia . . . there were no tribal gods or tribal obligations left, because there were no tribes. There were no old laws, because there was no one to administer or even to remember them: only such compulsions as the strongest power of the moment chose to enforce. Household and family life had disappeared, and all its innumerable ties with it. . . . The old Aryan husbandman . . . had lived with his herds in a sort of familiar connexion. He slew 'his brother the ox' only under special stress or for definite religious reasons, and he expected his women to weep

when the slaying was performed. But now he had left his own herds far away. They had been devoured by enemies. And he lived on the beasts of strangers whom he robbed or held in servitude. He had left the graves of his fathers, the kindly ghosts of his own blood, who took food from his hand and loved him. He was surrounded by the graves of alien dead, strange ghosts whose names he knew not and who were beyond his power to control, whom he tried his best to placate with fear and aversion.

When we realize that this very graphic description of the aftermath of war depicts the ebb and flow of conquered and conqueror throughout time, we marvel and are grateful for such records as do endure.

By 600 B.C., Attica was so covered with stone pillars testifying to mortgages on the land that it was described as a "huge graveyard." Solon, elected praetor to reform the laws, discovered such inequality of wealth that he abolished all state and individual debts. Thenceforth, lands were permitted to be devised away from families so long as the testators had no male children and "be not crazy through the infirmities of old age, the misery of distemper, or the enchantments of witchcraft."

By 322 B.C., Aristotle could write: "The laws of many states which aimed at making the people husbandmen were excellent. They provided that no-one should possess more than a certain quantity of land or that, if he did, the land should not be within a certain distance of the acropolis. . . . There is a law . . . that there should be a certain portion of every man's property on which he could not borrow money."

Egypt had many periods of civilization; one of her most interesting from a land point of view was the highly feudalistic Byzantine Empire. Papyrus leases of these times indicate many short-term arrangements, as though the lessee formed a new contract with another landlord for each crop. So that prior to seedtime the Nile's agricultural population may have had a titanic moving day. Between monastery and peasant, state and tenant, or tenant and peasant, the leases provided for rent paid mostly in produce. Where the land included pastures and palms a rent of taxes, wheat, cheeses, and mustards might have been required. For a ten-year lease on two vineyards, a tiller surrendered 128 jars of wine (including the jars) and some palms. Occasionally labor or new bricks was part of the payment.

But it is with Rome that we enter upon the main stream of our own heritage, via England, and as though preparing to move northward with Caesar's legions we examine the gifts they brought to the primitive Anglican landholder.

In the early days of the Roman city-state, a population of yeoman farmers solidly buttressed her power. But by 150 B.C., free proprietors of small holdings found themselves living side by side with wealthy landowners employing the slave labor taken in conquest. As the heavily taxed provinces began to export more and more grain to the peninsula in order to meet their responsibilities, the small landholders, unable to compete with the cheap importations as well as the slave labor of their neighbors, floundered ever more deeply into debt.

These factors, coupled with an aggressive agricultural policy on the part of the Church, finally tore their small holdings from them. Thus the descendants of free Roman farmers became tenants on the fields of their ancestors or else fled to the city to exist on state charity—a condition that was to repeat itself in seventeenth-century England, though from slightly different causes.

Eventually the rural economy of the Roman peninsula became roughly divided into these classes. A large estate was composed of two parts—the *curtis*, or lord's share, was cultivated by slaves under his personal direction; while the second part was allotted in shares to various *coloni*, tenants who paid fixed rents and who had determined services to their lord. This latter status was crystallized when laws were passed declaring that a freeman who occupied the land of another was regarded *ipso facto* as bound to the soil. This was the feudal system, therefore, that was to be England's law for the next five centuries, buried with the fall of Rome, and submitted to in an intensified form under William the Conqueror.

As Caesar drove northward he found the Germanic peoples living in much the same circumstances as the primitive nomad hunters spoken of previously. Two different tribes, he noted, practiced war and agriculture alternate years. Land was held only by loose tribal-family organization, with folk life clinging to a fortified place in the midst of a swamp or forest and with the arable fields some distance away. Although there might be a periodic redistribution of these fields, giving to the head of a family an allotment in

proportion to his closeness to an ancestor on either the paternal or the maternal side, it was not a hereditary right. Based only on use, the land could be lost through neglect.

When Caesar reached England he found there much the same primitive folk life as existed in the European provinces, but with a definitely new and confusing influence—that of the Norseman.

All of early Norse social structure was based on an elaborate system of rank founded in land-ownership. The highest of these layers was that of odal tenure, and, according to ancient law, "No man's land becomes odal to him until three forefathers have owned it and it falls to the fourth in unbroken succession."

Below this exalted position lay the great mass of people in a caste system so rigid that in the Middle Ages certain portions of the churchyards were marked off for the grave of *leysings* (semi-freedmen). These men had symbolically "drunk their freedom ale" and paid off their bondage with the help of *kindred* (relatives) but had not acquired enough land to set them in truth free. If a leysing died leaving destitute children, they were placed in the grave with him to starve—although the last remaining one must be removed and raised by his lord. In this social structure the lowest creature was the miserable *thrall*, the chains of whose slavery could rarely be broken though he had a hundred kindred to swear for him.

Early transplanted into England, this intense need for landownership as a means of gaining social freedom became a passion which permeates our culture to the present day. The carefully nurtured garden of the ordinary Englishman's castle reflects it as truly as does the pride of millions of small American home owners. Yet merely to be an alodial owner did not convey complete freedom to the pre-Roman Englander. The size of his holding was of utmost importance and was based on centuries of ethnological evolution.

Long before recorded history, man harnessed his beasts to the plow. In hilly countries it would be a single ox, but on the flat wheat-growing plains a yoke of eight was common over much of England and western Europe. The furrow long of this team became our well-known furlong; the area that such a team could plow in a day was our acre. Where a single ox was used the shape became square rather than rectangular, and it took several such units to equal the eight oxen strips or acre.

In time the fallow-plowed strips around each tribal village became playfields. A man could toss a ball from balk to balk; now the statute acre of 22 yards is England's cricket pitch. Henry VIII decreed that longbow practice should be a furlong's length; while the old foot race of a furrow and back survives in the standard quarter-mile race.

We find this colorful scale in the tenth-century Venedotian Code, whose origins even then were lost in ancient tradition.

Starting with the barleycorn,
3 lengths of the barleycorn in the thumb
3 thumbs in the palm
3 palms in the foot
3 feet in the pace
3 paces in the leap
3 leaps in the land (tyr)
1000 lands in the myltyr
And that measure we still use here.

Thus the land, or *tyr*, was 27 natural feet, or, in reality, the small end of an eight-oxen strip. Placing three of these "lands" side by side we have the equivalent of an English acre. Found in both Britain and Gaul, this also accords with their old mile measurement of 1,500 paces.

To become an odal landowner in early England a man was required to show 100 head of cattle and be what was known as a *XII hyndeman*. Based on a slightly different but related scale to the one already given it ran:

30 acres to a yardland
4 yardlands to a hide (or hynde)
making,
1440 acres to 12 hides.

Thus a *XII hyndeman* was, even by modern standards, a very wealthy landowner and well deserving to be a freeman. But even for this early Briton there were taxes; he must pay to the nearest chief a *questva*, or food rent, of specified amounts of honey, cheeses, ale, geese, and so on.

In England during the Roman occupation two parallel systems of landholding merged to greater or lesser degree with the culture of the conquerors. To the east, a village community like that of the German mark had a villa, or manor, as its nucleus. The open strips of the eight-oxen teams became a rotating field system with common pasturage for both lord and tenants. In the pastoral west, the social structure was much less tightly mortared.

Redistributions of tribal lands continued the open-field system indefinitely. And even today, in portions of the island, these now enclosed tribal lands have been subdivided to virtual uselessness among the descendants of the early herders.

Thus the Anglo-Saxon kings who followed the Roman exodus took over the leadership of a very land-proud people. In the eastern counties, they came into possession of two types of aristocratic holdings, those held by the extinguished Roman lords and those held by the remaining few odal Englishers. Declaring such holdings to be *terrae regis* and of hereditary proprietorship, they allotted all other land excepting that held by the Church to their subjects as *folc* land (under a folk law that permitted neither alienation nor bequest from the family originally owning it).

Since these *folc* lands were often large and rich both Church and State soon coveted some share of them. A device known as *land boc* proved the solution. In this document, the king conferred upon the Church a right to exact tribute from the land, which right finally developed into a hereditary tax. Anxious for bequests, the Church also introduced the right for *folc* landowners to sell or devise a share of their land.

When disputes arose as to title the Church began to insist upon written documents—a proof naturally lacking under folk-law inheritance. Soon all opposition to bequests to the Church was forbidden. This concern for his bishoprics was expressed in a law of King Ethred: "And we command that every man give his church shot and just tithe... that is, as the plough traverses the tenth acre."

So strongly did land confer civil rank and personal privilege upon the Anglo-Saxon that the degree of tenancy a man enjoyed was the determining factor. Eorls held under the Crown, with ceorls, the very numerous English yeomanry, making the foundation walls of the English social structure. And "If a ceorl thrived so that he had fully five hides of his own land, church and kitchen, bell-house and 'burgh' gate seat, and special duty in the king's hall, then he was thenceforth of thane-right worthy.... And if a thane thrived so that he became an eorl then he was thenceforth of eorl right worthy." Thus well established as a freeman in alodial (absolute) ownership, the landed man's only desire was to increase his lands and raise his rank under his chosen leader.

When Saxon Harold fell at Hastings in 1066 before William the Conqueror, the old liberties were lost; only through the centuries would they be wrested back one by one from a succession of tyrannous rulers. In 1082, William I, King of England by the Grace of God, called an assembly of all landowners at Salisbury. There his clever Norman lawyers were waiting for the freedom-loving islanders. By outright robbery England fell under a yoke of feudalism such as the world had never before seen—in the pretext of divine right.

William the Conqueror ordered a survey of the kingdom, the famous Domesday Book. This county-by-county census, on which he afterward based his taxes, listed the land's proprietors and the extent, value, and liabilities of their chattels, stock, and holdings. Dipping into it with lavish hand, William bestowed upon his followers, as well as the Church, thousands of acres already held alodially by the conquered population. These fraudulent land titles have sustained countless generations of English nobility, and, through the grants of various kings, are the source today of numerous American titles.

Many of the manors were as small as the Manor Fallei, located in the Devonshire section of Domesday. Held of the bishop by one Drogo, he had half a ferling and 1 plow (land) in demesne, or for his own. Drogo also recorded 1 villein (a freeman except in respect to his master), 2 borders (cottage tenants), 1 serf, 3 head of cattle, 5 swine, 6 sheep, 10 goats, 4 acres of wood, and 6 acres of meadow.

At this point an outline of the organization of feudal land tenure is in order. At the peak of the pyramid ruled the king, sovereign owner of all; directly below him, as conditional tenants who held only so long as they remained faithful to the court, were the great lords and the princes of the Church. These tenants *in capite* had the privilege of granting a part of their holdings to lesser persons upon similar conditions—that is, fidelity to the lord and payment of services and other dues. While the latter, in turn, might regrant subdivided portions to even more unfortunate beings. Ultimately we reach the miserable serf who labored on the land.

Often an alodial holder who was poor and weak voluntarily gave up his land to a powerful lord to obtain protection. These holden lands then

became tenements and their previous owners tenants—as in the old Roman system. Thus all were pledged to loyalty to the Crown; rebellion was treason and punishable by loss of land and livelihood, if not death.

On each manor the lord held *in demesne*, or as his alone, half of all the land; the second half was held *in villenage*, or in open fields for the use of his tenants. He owned the eight-oxen plow, and his personal land was worked by his tenants as part of their services toward him. Among the tenants the villeins ranked highest. Owners of two-oxen teams would usually have a yardland, or 30 acres, of allotted strips. The cottiers below them had 5-acre strips but no oxen and spent most of their time in the labor of the lord. Lowest of all were the *servi*, mere household thralls, and the serfs.

Common pasturages diminished as the lords encroached upon them. In addition, laws of the Norman period restricted the villagers' cattle to those which had been *couchant et levant* (born and raised) upon the land. The open three-field system continued with a rotation of wheat and rye on the first, barley, oats, and peas on the second, while the third lay fallow.

Of these times, Chancellor James Kent, famous New York barrister in the early nineteenth century, wrote:

The Norman interpreters, skilled in all the niceties of the feudal constitutions . . . took a hand to introduce not only the rigorous doctrines which prevailed in the Duchy of Normandy, but also such fruits and dependencies as were never known to other nations; as if the English had, in fact as well as theory, owed everything they had to the bounty of their sovereign lord.

Kent listed the great curses as the inalienability of lands; the rigorous and indefinite personal services required; taxes under the guise of aids, reliefs, primer seisin, profits for wardship and marriage; and fines for escheats and alienation. Except for personal service and the profits of marriage these evils continued in England even in Kent's own time, as well as being imbedded in American law.

For the sovereign right of eminent domain lies now with our state, and the taxes it collects supplants the old "determinate rent"; while death taxes, taxes on wills, diverse taxes on deeds, and the still remaining escheats, are modern counterparts of the ancient feudal "fruits."

By 1290, lands were allowed to be alienated by the living without the consent of their feudal lord, although it always escheated back to him upon default of the new owner. Yet not until 1541, during the reign of Henry VIII, could the estate of a dead man pass by devise.

The Black Death of the fourteenth century brought further hardship to all of England. The first wave killed off tens of thousands of tenants, while a second thinned the ranks of the nobles. Starvation followed in its wake, so that farmers who after good harvests had once scorned "penny-ale, bacon, and day-old cabbage" while demanding "new corn, wheaten bread, fresh meat and fish" were grateful for whatever could be scratched from their stricken land. The epic of *Piers Plowman* in 1362 describes their plight.

I have no penny . . .
Pulettes to bugge,
Ne neither gees ne gryes,
But two grene cheeses,
A few crudders and creme,
And an haver cake,
And two loves of benes and vane,
Y bake for my fauntes.

The epic goes on to tell that *Piers Plowman* had still,

And ek a cow and a calf,
And a cart mare
T draw afeld my donge,
The while the drougte lasteth;
And by this lifelode we mot lyve
Til Lammesse tyme
And by that I hope to have
Hervest in my croft.

Military obligations of the Church to the Crown had been fixed by William and were enforced by his descendants, though in diminishing extent as warfare lessened. In the twelfth century, the Archbishop of York maintained twenty enfeoffed knights for a rotation of services as castle guards. Scutage, a tax levied by Parliament in lieu of these services, gradually supplanted the military obligations of the bishoprics—although secular tenants *in capite* were still held liable. Finally King John's abuse of scutage, by demanding heavy fines in addition to it, established it in the *Magna Charta* as an "extraordinary or voluntary aid" rather than one of divine right.

Since the term *fee simple*, denoting the most complete ownership of land possible, comes from the word *enfeoffed* used above, it is interesting to note its origin. In feudal times, the transfer known as *seisin* occurred when the lord of the manor took his sworn knight, or *feof*, to the land in the presence of witnesses and handed him a clod of earth or a branch as a symbolic transfer of the property. No deed was required. If the transaction was important, a document known as the charter of *enfeoffment* would be drawn up. Later, under the Statute of Frauds, all non-documental transfers were considered *lessees* at will.

Socage tenure (from the Old French *soc* for plow) was an agricultural residual from pre-Conquest times. Frankalmoign tenure denoted that of the Church; while copyhold tenure described the holdings of servile tenants whose rights were recorded in the copy of the manor. Life estates were the common "widow's dower." To receive it she must remain quarantined for forty days following her husband's death, pay a fine to the lord, and desist from remarrying without his consent, lest she carry some portion of the manorial holdings to an enemy.

Not until the time of Cromwell was the Tenure of Chivalry, most throttling of all feudal chains, unshackled from the English landholder. An enactment that a hundred years later Sir William Blackstone, supreme authority on English law, was to hail as "greater than the Magna Carta" declared:

That the court of wards and liveries, primer seisin, and ousterlemains, values and forfeitures of marriage, by reason of any tenure of the king be taken away. And that all fines for alienation, tenures by homage, knight service, and escuage, and also aids for marrying the daughter or knighting the son, and all tenures of the king *in capite* be likewise taken away. And that all sorts of tenures, held of the king or otherwise, be turned into free and common socage, save only tenures in frankalmoign, copyholds, and the honorary services (without the slavish part) of grand serjeanty.

In addition, the Statute of Frauds and Perjuries required a deed for the conveyance of freehold estates, to supplant the ancient *seisin* of the common law.

These were great steps and did much to free the land of its burdens. Yet with the Restoration in 1660 the great landholders gobbled up more and more acreage. This was particularly true of the

revitalized Church, whose account books of this period overflow with entries of new brick, lumber, mortar, and payrolls.

One of its princes would often own more than a score of manors; he could journey 15 or 20 miles a day and spend each night under his own roof. At each stop he would hold court to hear the report of his chief tenant and settle complaints. One Lord Baltimore was tenant in 1667, and a petition against him complained: "he makes half the bridge wee the other, he fishes half wee the other, wee feed all and he fences against us—he would fish all—but for no reason." (We are not told whether or not this ambitious lord was restrained.)

Yet by the time of the Restoration a complicated abuse of land was actually sinking it into a morass. The debts of entailed estates (those restricted to inheritance through a single line of issue) combined with a system of uses (whereby landowners evaded the common law and the liabilities incident to ownership of the soil) had greatly diminished its value.

Rents were said to be "decaying." Coupled with this was the rapidly impoverishing soil—drained through centuries of working with inadequate fertilization. To combat the latter many manors enclosed the open fields, turned them to grass, and started sheep raising. A verse of the period mourns:

They have eaten up our meadows and our downs,
Our corn, our wood, whole villages and towns;
Yea they have eaten up many wealthy men,
Besides widowes and orphan children.

Built up once more through natural animal manure, the fields were turned to corn raising on a large scale. But the old village farms were disappearing. And where was this uprooted restless population to go? Too numerous to be entirely absorbed by the industrial revolution, they roamed the highways—looting, robbing, and terrorizing. Half-starved, rebellious, and diseased, these homeless thousands pointed an accusing finger at Parliament and the Crown, and the government pondered the question of how to get rid of them.

America was the answer.

King Henry VII established himself there when in 1496 he empowered John Cabot to discover all possible lands in the name of the Crown, which lands he then promised to *enfeoff* to Cabot and his

heirs. His son, Henry VIII, also chose to ignore the papal bull of 1493 which granted to Spain all lands found west of a meridian 100 miles west of the Azores "out of pure liberality, infallible knowledge, and plenitude of apostolic power and by virtue of the authority of omnipotent God granted to us in St. Peter and the Vicarship of Jesus Christ which we administer upon earth." Actual possession of the country was taken under grants reading, "Elizabeth by the Grace of God, Queen of England: to all people to whom these presents shall come greeting. . ."

This right through possession backfired, however, when Holland, through the establishment of fur-trading posts, also started claiming the new continent. The race for land thus grew ever more intensified and hostile as every seafaring nation in Europe resolved to dip long fingers into the horn of plenty that was virgin America.

It is well recorded that in the beginning the American Indians were on the whole friendly and generous. Black Hawk dictated in the account of his life: "The Great Spirit gave it to his children to live upon and cultivate as far as is necessary for their subsistence; and so far as they operate and cultivate it they have the right to the soil." Considering the land sufficient to support both their own primitive economy and that of the first settlers, Indian Squanto taught the Pilgrims how to fertilize the soil with fish and tend it for corn growing. While Dr. Erik Borsk, Swedish pastor in Delaware, wrote: "The Indians and we are as one people."

Manhattan Island was not bought for \$24.00; the few trinkets accepted from the Dutch were considered as gifts by the Indians. As echoed by Tecumseh in 1810: "The land belongs to us all, for the use of each. No party has the right to sell. . . ." But the white man's greed for land and his subsequent corruption of the Indians with rum soon destroyed all brotherhood.

With childish ingenuousness the Indians began "reselling" the banks of the Delaware to both the Swedes and the Dutch, declaring: "All nations coming to the river are welcome and we sell land to all who ask for it." So the Swedish governor was soon complaining: "The Dutch destroy our fur trade with the Indians, strengthen the savages with guns and ammunition . . . they see we are weak." But he did not intend to give up easily, for he continued. "A new grist mill has been built; I have caused waterfalls to be examined

for a sawmill. We need vessels to trade with the West Indies. We need unmarried women. The freemen desire to know their privileges and the criminals ask us how long they must serve." (Swedish criminals were given their choice of emigrating to Delaware or hanging.)

Many diverse means of obtaining land in the colonies were open to the hardy. Grants were often made to persons promising to erect a mill, a tannery, a powder factory, or a salt works. Schools and churches were equally desirable. In the settlers' grants made by the Crown a shareholder in a company received 50 or more acres for each share, valued at £2 10s. Under the headright system land was given to anyone who paid his own way or that of another to America. Family-size grants to individuals through sale or for meritorious or military services were common, as were grants to groups to develop industry.

And for all these people the prime desire was land free of the old oppressions of absentee landlords, primogeniture and entail. The immortal spark of the ancient Norse alodial landowner was undoubtedly the one that, in the end, fired the flintlocks of revolution.

In his essays Dr. Benjamin Rush recorded that in colonial Pennsylvania it usually took three different changes of hand to establish a farm. The original free-spirited settler who bought from William Penn and performed the brute labor of wresting a tract from the wilderness would seek the hinterland once more as civilization with its laws and fences closed in upon him. The second owner, taking over cleared fields and a small cabin, often found the remaining tasks too heavy for his liking. He would sell out and wander to a gentler climate to the west or south. The third owner, however, usually persisted, building a large barn to enclose his rich harvests.

For the sake of brevity only one or two of the early colonies will be considered in detail here. Of them all, the story of the Pilgrims is perhaps the most clear-cut in demonstrating how the New World became vested in our forefathers.

Between 1606 and 1609, James I granted to a group of Englishmen known as the Virginia Company the land extending from what is now Wilmington, Delaware, to Wilmington, North Carolina, and then west to the South Sea (Pacific Ocean). Soon portions of this grant were placed for sale on the London market. Meanwhile, a group of English Separatists had learned while in

religious exile in Holland of the fertile Delaware Valley. Through sales of stock sold to London merchants they raised a sum sufficient to buy a sizable settlement from the Virginia Company. As soon as their agent, John Pierce of Plymouth, had completed the purchase they embarked. Established on a communist basis, the Pilgrims allotted to each member of their company over 16 years old one share of company stock; all those between 10 and 16 received a half share. With a pool of profits from their land they planned to eventually repay their debt.

But as every school child knows, the sturdy *Mayflower* was blown off her course by storms. Instead of Delaware Bay the landing was made at the site of Plymouth, Massachusetts, on December 29, 1620. By grace of the absent owner of the land (the Plymouth Company of New England, a group of forty men to whom King James had just granted a million square miles) the adventurers remained over the winter. Their agent, learning of the accidental landing and of their liking for the rocky shores on which they found themselves, attempted to secure a new grant for them. Finally the Council of New England, which had supplanted the Plymouth Company, leased them a tract at an annual rental of 2 shillings per 100 acres.

Seven years later the Pilgrims sold to Governor William Bradford a monopoly on the Indian trade, enabling them to buy back their company shares. Released from self-imposed communism they then allotted to each independent settler 21 acres, with meadow lands remaining open for the use of all. These titles were always ignored by the Crown, however, and seventy-one years later it suppressed the colony and absorbed it into the Massachusetts Bay Colony.

In direct contrast to the independent action displayed by the Pilgrims, the story of Virginia was typical of those colonies which retained so much of feudal tenure, however unwillingly.

James I's original grant to the Virginia Company was made primarily to encourage mining in the New World. To gold-hungry Europe the extraction of tons of this precious ore from untapped America persisted in its dreams. Thus one-fifth of all gold and silver and one-fifteenth of all copper mined was, by terms of the grant, to revert to the Crown. With these qualifications only the land was otherwise given in the "free and common socage" of the day, or in the highest type of feudal tenure.

By 1624, however, Virginia was transformed into a mere dependency of the Crown through an act revoking her first charter and creating a royal governor. By 1637 a system of quitrents was being enforced. Annually payable to the Crown or to some noble absentee proprietor, these began seven years after the date of each patent. In 1644 an act provided that all abandoned plantations, or those in default of rent, should revert to the King to then be regranted by him.

Disappointed in the trivial amount of gold discovered in the Colonies, the Crown was finding in agriculture an unexpected source of revenue via quitrents. With the scarcity of English hard money in the Colonies these rents were paid in great shiploads of produce. In the north (New York and Pennsylvania) wheat was usual; while the Lower Counties (Maryland, Virginia, and North Carolina) sent tobacco. South Carolina paid in indigo, silk, rice, pork, and English peas. Sometimes Pennsylvania paper money or Spanish coins were forced upon the absentee proprietary or Crown.

Although the Council of New England, with its republican concept of landownership, resisted the imposition of quitrent, it was not until the time of William and Mary that a regrant stamped them out forever. In Virginia the process of emancipation was considerably slower. Protested for over a century to each succeeding royal governor, no permanent progress was made in throwing off the hated tenure until October 12, 1776.

By that time Thomas Jefferson's *A Summary View of the Rights of British America* had aroused a tornado of feeling in both the Colonies and England. Declaring that his country had never been acquired by William the Conqueror, he challenged the right of a British king to make division of it. In a proposal to the Virginia Assembly for a bill "declaring tenants in tail to hold their lands in fee simple" Jefferson said upon its passage: "I proposed to abolish the law of primo-geniture, and to make real estate descendible in percenary to the next of kin, as personal property is, by the statute of distribution." With the establishment of a land office to ascertain "the terms and manner of granting waste and unappropriated lands" quitrents and feudal tenure as such were finally swept away.

As the rights of squatters, who had previously paid rent to the King, became established in fee simple, a race ensued to beat the next man to

all unclaimed lands. Land grabbing and land speculation were not beneath the dignity of the most hallowed of the Nation's heroes. George Washington, with a shrewd eye ever alerted to good land, advised his intimates to carry out their search "Snugly under pretense of hunting game." Later he was very chagrined to find that someone had beaten him to the desirable area around Fort Pitt.

Yet the historic arm of the Crown stretches even yet over American soil. In Michigan in recent times a suit was brought to determine the fishing rights in a certain Pine River as between the public and an individual riparian landowner on its shores. Michigan, the court reminded, had a unique history in having been a part of the Northwest Territory, bought by Congress from the Virginia Company, grantees of James I. Under the old common law of England all navigable streams were considered held in trust by the Crown for the benefit of its subjects for navigating and fishing. Although Pine River was not navigable in the same legal sense as English tidal rivers, it was classified as such under the timbering needs of Michigan, since it was capable of floating logs. And while all Michigan river beds belonged to the riparian landowners, with lake beds belonging to the State, the actual fishing of the waters must be considered separately. The ancient trust of the Crown over navigable streams had passed through two subsequent devices and the formation of a State, to become vested in the State. Fishing rights in Pine River, it was held, belonged to the public under this trust.

As in all countries, land boundaries in the United States evolved by many curious means, some of which are almost forgotten even now. In North Carolina, settlers of the Tennessee region for a time organized the State of Franklin. It persisted for three years under Governor John Sevier, was then included in North Carolina, and finally, six years later, entered the Union under Tennessee.

In 1648, a series of Russian explorations and that of a Dane, Vitus Bering, had established Russian sovereignty over Alaska, to acquire which territory the United States would pay only \$7,200,000 in 1867. In 1820, the Russian-American Company, venturing farther south, built Fort Ross at Bodega Bay, 30 miles north of San Francisco. But in 1841 they sold their fort and withdrew.

Comparative maps of North America from 1664 to 1775 show amazing changes of ownership. On the first, possession of all readily habitable land is divided about equally between the French and Spaniards, with only a small eastern coastal strip denoting the English. By 1754, England had gained possession of the Atlantic coast line from South Carolina to the Saint Lawrence River and made a deep penetration of all the Hudson Bay area. By 1775, a vanquished France had completely withdrawn, leaving the continent almost severed in a straight line up the center between her two arch rivals, England and Spain.

For Spain was tenacious. Fanning up from Mexico, Franciscan missions had rooted themselves throughout the southwest. Enclosed within 12-mile-square farms they appropriated the choicest spots of the sunny Pacific coast, and present-day Los Angeles is beach poor because of the huge grants made to individuals, as well as the Church, by the Spanish kings. Of all the States of the Union, golden California's land history is at once the most corrupt and colorful.

When the United States bought Nevada, Wyoming, Colorado, New Mexico, and parts of Arizona from Mexico for \$15,000,000, she pledged herself to recognize existing land titles. This promise proved a bonanza to speculators in Mexico as well as to the unscrupulous Mexican governor of California, Pico. By the time the treaty was signed, they had sold and resold plots of land so many times that in San Francisco alone the best sections of the town were claimed by five different forged postwar grants. These millions of fraudulently sold acres provided an unceasing headache to the new government. In addition, the enormous prewar Spanish grants made a fertile basis for intense profiteering in the three years that followed the discovery of gold in 1848, when California's population jumped from 10,000 to 200,000.

When Congress took over the problems of administering the settlement of this broad new continent, much jealous opposition existed. Many States had been buying territory directly from the Indians. In Georgia, in 1827, land ceded by the Creeks was disposed of in a huge lottery in which disabled veterans of the British and Indian War were allowed two extra draws, as were orphans and illegitimates. Meanwhile land in South Michigan was sold at auction in Boston for from 37½ to 60 cents an acre. Finally

the Federal Government was forced to declare many of these transactions void, and the western lands became public domain, subject to many vicissitudes.

In 1850 the Swamp Land Act robbed the government of "30 millions of the best land in America." Fraudulently classified as near worthless by local politicians, this land was then bought in by speculators at from 10 to 80 cents an acre. The Desert Land Act and the Timber Culture Act served to further deplete the vast public holdings. From 1850 to 1871, Congress granted to seventy-two different railroads a total of 94,239,000 acres; the States added to these gifts an additional 36,224,991 acres that had previously been a part of the public domain. Although supposed to be only agricultural, coal, or iron land these holdings often contained rich stores of gold, silver, copper, or oil. On all, the railroads profited unconscionably—exploiting and destroying until only desert and denuded waste remain of millions of once fruitful acres.

Fabulous wealth was gained by foreign buyers, to whom another 20,000,000 acres were lost. One German firm owned a million acres; a group of English held fraudulent title to California redwood land worth \$10,000,000. Often American farmers were paying heavy rents to such distant landlords.

Squatters on the land to the west of the Mississippi River had sometimes been established for a decade before federal surveyors reached their land. Meanwhile eastern speculators had obtained title to their hard-won homesteads and had them at their mercy. The insistence of such squatter populations as the Mormons in Utah upon their "natural rights" as opposed to the diverse federal laws created many lively debates in Congress.

Homesteading, or the direct deeding of public land to qualifying individuals, is common the world over. But the remaining public domain owned by the State and Federal governments was so glamorized to the people as to become a source of financial ruin to almost as many as it benefited. For land is, in truth, a *donna mobile*—sensitive to rain cloud and wind, changing temperature or rising waters. Yet the lure held, and as late as 1903 a booklet called *The American Settler's Guide* gave complete information to the would-be pioneer.

The advantages of homesteading were enticing. All debts incurred prior to it were voided; a man

started with a clean ledger. Yet there were costs. The most expensive homestead (with land valued at \$2.50 an acre because of its proximity to a railroad) totaled \$34.00 in fees. A residence must be erected thereon (estimated at \$75.00 for lumber) and the homesteader's old domicile abandoned, though not necessarily continuously. After five years of occupancy and crop raising the patent, or deed, conferring all land rights would be issued to the deserving one by the President of the United States and the Recorder of the General Land Office. In the case of desert land no crop need have been taken from the land, but it had to be ready for cultivation. That is, irrigation ditches down to the smallest legal subdivision had to be completed.

In New England it was said that the most casual Irish immigrant could own a prosperous farm within a few years. The virgin soil produced seven times the potato crop that the most scrupulously husbanded soil would yield in the old country. Not so some of the western lands.

For the homestead policy, which in 1891 supplanted selling in order to encourage family settlement, lured thousands into the short-grass region of the western plains (with annual rainfall under 20 inches) in the hope of high reward. Little did they suspect that a prodigious crop the first season could be followed by only stunted growth the next. Even when the original 160-acre holdings were increased to 640 acres of grazing ground, they proved too small to support a family.

Lifetime savings were lost, and 15,000,000 acres of public domain property were abandoned. Erosion and untold human suffering are the most recent results. While insurance companies operated on a large motorized scale thousands of acres representing foreclosed mortgages, displaced farming populations became a national scandal in the late 1920s and early 1930s.

Except for Alaska there is little free land left on which present-day Americans may establish homes—and even there speculators have already cast their nets. Reputedly, title to thousands of square miles of almost unknown land is firmly secreted in the lock boxes of absentee owners.

Yet never as during these inflationary postwar times have people been more sorely in need of a footing on God's green acres. In California it is estimated that close to ten thousand families are living in trailers or even automobiles—the latter moving daily to new parking spots to avoid

detection. Hundreds more huddle within such makeshift walls as scrapped airplane fuselages.

Over a century ago Thomas Jefferson challenged: "The earth belongs to the living; the dead have no right over it. . . . They must perpetuate republican truth by making the homestead of every man a holy thing which no law can touch, no juggler can wrest from his wife and children. Until this is done the revolution will have been fought in vain."

Man, cast out from the Garden, finds the way hard. His own institutions have failed him. In the days of the nomad tribe a place was guaranteed to each by the chosen leader. Then, little by little, established chiefs asserted their right to the choicest fields and collected taxes on the remaining ones. Modern civilization has given us the anomaly whereby the state, while demanding complete fealty of its citizens, concerns itself little with their individual living space.

But, as Jefferson saw, there is truth and direction in the ancient laws; with study and sincere effort we may find a way to restore to each of humankind his divine birthright. Suggestions are many—from revolutionary confiscation to more orderly schemes in which land taxes are abolished and the major portion of rentals paid to the state for the benefit of all. Yet somewhere our sociologists and legislators, working together, should find an answer to end land exploitation and to ensure for every living person the psychic and economic health that comes from having a taproot firmly embedded in mother earth.

But we must hurry. Or perhaps that most migratory of all peoples, the British Islanders, already constructing interplanetary rockets, will lead a new land race through the skies.

[The author of the above article, Mrs. Jane Carter Nolte, resides at 3420 Livingston Street, N. W., Washington 15, D. C.—*Editor*.]

EUROPE'S RECURRENT LAND PROBLEM

V. ALTON MOODY

Department of History, Iowa State College

Signs of Europe's recurring postwar economic problems began to appear even before the end of the Second World War.¹ It was recognized that postwar contentment based upon the much publicized freedoms must involve employment for Europe's rural population and food for her industrial laborers. To thoughtful students it appeared that a solution of the problem of the poorer peasantry in Eastern Europe was a key to the whole; that land reform might be an approach to economic democracy as a precondition for the introduction of political democracy; that to the facing of primary needs must be added the solution of the complex problems centering on a drastic land reform.

For many years Europe had been conscious of an overconcentration of landownership, and before 1914 the situation was growing worse. Post-World War I authorization of reform legislation helped to bring widespread efforts to effect a redistribution of land. Official efforts to improve the lot of the landless and the underlanded came

to be known generally as agrarian reform and for a time promised widespread relief.² Unfortunately Germany, Austria, Hungary, Bulgaria, and to a large extent, Poland, averted the movement; a reactionary swing of the pendulum checked it elsewhere; landownership alone failed to bring peasant prosperity; and World War II all but ended the movement. Indeed much of the work was undone and awaited redoing under great difficulties.

In the meantime the world saw the Prussian landowning nobility provide the German army with half its generals and two-thirds of its other officers and come to form the "respectable" right wing of Nazism. Probably they made the war possible for Hitler. Austrian landed interests prepared the way for Axis activity there. The Hungarian landowning nobility was thoroughly reac-

¹ This article was presented at the meeting of the Agricultural History Society with the American Historical Association at Cleveland on Dec. 27, 1947.

² V. Alton Moody, "Agrarian Reform Before Post-War European Constituent Assemblies," *Agricultural History*, 7:81-95 (April 1933); David Mitrany, *The Land and the Peasant in Rumania* (New Haven, 1930); and Lucy Elizabeth Textor, *Land Reform in Czechoslovakia* (London, 1923).

tionary and brought their country to Hitler as a loyal and effective puppet. A cultured and gallant but impractical Polish counterpart brought a similar reaction to Poland and won the friendship of neither of her great neighbors, Germany and Russia.

With the approach of the end of World War II and a second great victory for liberalism, these vestiges of feudal nobility in Eastern Europe faced liquidation, and agrarian reform was reinaugurated vigorously in neighboring countries, also, where it had its inception a generation ago. Whatever the details under varying political and economic conditions there was a general pattern. Great landowners who guessed wrong politically during the war now faced confiscation without recourse. Even loyal estate owners were likely to face expropriation with compensation somewhat less than the current value of their land.

Arguments for the action taken now appeared much less frequently than between the wars. The field had been covered, and the arguments were generally well known. The land hunger of the peasants was perennial and might be satisfied by action smacking of the retributive. The same action might rally a loyal and potentially militant peasantry behind the social and political structure of the liberalized postwar governments responsible for reform. In many cases it would help to solve an urgent refugee problem.³ Furthermore, the time had come once more when there was a shortage of food, and there were those who believed that urban support of rural ambitions might increase urban food supplies. Some insisted that a landowning peasant and his family would, under the incentive of ownership, work longer hours, guard agricultural interests more zealously, and produce greater quantities of the much needed food. The belief was effective regardless of the economics of the argument and of the later claim that the movement was not impelled by economic motives but by social and political forces and the desire to right a historic wrong.

There was a desire also to eliminate the economic and social power of a landed aristocracy along with

its political and ideological influence for reaction, militarism, and nationalism in its many objectionable forms.

Again there was the fear that landowning nationals of former enemy countries might induce counterrevolutionary movements. The whole tied in with the old idea of an economic war in which enemy nationals should be identified with enemy governments and therefore should have their property expropriated. That certain students of international law opposed such practices, as an example of turning the clock back several hundred years, failed to check the movement in the early twenties, and a greatly divided opinion in America was small comfort to enemy nationals in newly established European republics.⁴ A subsequent reaction was reversed more recently by a wave of war-born liberalism and republican nationalism. Agrarian reform, for many, became a "basic" requisite for such countries as Poland, Hungary, Rumania, and possibly Germany. For these countries it was highly desirable.⁵ Other thinkers, however, continued to point out that landownership alone would be tragic. It must be supplemented by education, credit, cooperatives, public works, and improvements in agriculture and transportation.

Pleas for reform were stated in no uncertain terms and brooked no denial. They were stated concisely in what came to be known as the Peasants' Charter, drawn by outstanding peasant leaders of Europe in 1942 and intended as a supplement to the Atlantic Charter. "The Land for the Peasant" was proclaimed as the watchword, and supplementary demands were itemized. Each was designed to add to the potential economic and social well-being of the mass of the inhabitants of rural Europe, many of whom had been untouched by preceding waves of reform. To individual ownership with its necessary safeguards was added as requisites cooperation, agricultural credit, stability of prices, aids to farmers, agricultural and technical education, a rural medical service, combination of agriculture with appropriate industries, improved communications, an international outlook for agriculture, and the cooperation of all

⁴ John Dickinson, "Enemy-Owned Property: Restitution or Confiscation?" *Foreign Affairs*, 22:130-131 (October 1943).

⁵ Seton-Watson, *Eastern Europe Between Wars*, 105-106; Tibor Mende, "Land Reform in Germany," *Fortnightly Review*, 165 (n.s., 159):170-176 (March 1946); and editorial in *Des Moines Register*, Nov. 15, 1946.

³ Tibor Mende, "Land Reform in Germany," *Fortnightly Review*, 165 (n.s., 159):170-176 (March 1946). Cf. Elizabeth Wiskemann, "Eastern Europe and Western Diplomats," *ibid.*, 164 (n.s., 158):304-310 (November 1945); and Hugh Seton-Watson, *Eastern Europe Between Wars, 1918-1941* (Cambridge, 1945), 75-122.

powers in reconstruction.⁶ Peasant influence in the postwar world remained to be determined.

Postwar reforms, said peasant leaders, must be completed with those economic measures which would make them into real agrarian reforms and with those social and political measures which would make them the vehicle for a true social advance. No more must dispossessed landlords find such refuge in industry and finance as to enable them to become entrenched there, to demand government preference at the expense of the peasantry. No more, they said, must fiscal policies be framed at the expense of the peasant. An increase in duties on agricultural implements, for instance, seemed preposterous when coupled with a decrease in duties on trucks and light passenger cars. No longer, further, should new democratic institutions place so very few real peasants in parliamentary bodies.⁷

Opposition and obstacles to agrarian reform after World War II appeared from divers sources. That an entrenched landed aristocracy would oppose unless tempted by high prices or political uncertainty was to be expected. Interwar government officials and their friends, their liberalism tempered by political experience and the interwar reaction, could easily satisfy themselves that their program had been executed, that all was well, and that tampering with current conditions would bring difficulty if not disaster. Many of the most able agricultural economists continued to warn of disrupted management and of problems of machinery, marketing, roads, housing, and drainage. Much of Europe, like that east of the Elbe River, it appeared, was unsuited for the diversified agriculture of small farming and would be too far from market for the ready sale of perishable crops, if forced to abandon large-scale grain production.⁸ Current administrations must estimate the immediate effects of reform on taxes, expenses, the production of desperately needed food, the economic and political stability of new owners, and the outlook for foreign aid whether military, financial, or otherwise. The

⁶ Bernard Newman, "Peasant Europe," *Nineteenth Century and After*, 136:172-181 (October 1944). For the text of this "Peasant Programme" see the Royal Institute of International Affairs, *Agrarian Problems from the Baltic to the Aegean* (London, Chatham House, 1944), 17-23. For biographical notes on the twelve notables who signed unofficially, see *ibid.*, 23-27.

⁷ *Ibid.*, 38-44.

⁸ Hermann Levy, "Pattern for German Agriculture," *Fortnightly Review*, 167 (n.s., 161):274-278 (April 1947).

land problem in fact became little less than an international political football in the present alignment between the East and the West.

A Polish scholar reported for his government to the League of Nations that immense efforts had been made by 1939 in the parceling of land and in the consolidation of plots; that the liquidation of servitudes would be terminated within a couple of years; that steps were being taken to divide up or regulate common pasture land, most of which was neglected or badly managed; and that improvements were delayed merely by the lack of capital. Further parceling, it appeared, would be inadvisable on account of national food-supply considerations, since parceling "temporarily diminishes agricultural production." Moreover, he believed, to parcel out large estates which were intensively farmed would not increase the reserve of land, particularly for bringing dwarf holdings up to standard size, since land would have to go mainly to people already employed on estates. There would be an immense loss of estate equipment, and Poland lacked capital with which to supply new settlers. Furthermore, estates exempted from parceling were held to be very well managed, in most cases, producing selected grain crops and raising purebred cattle, thus playing a great part in the dissemination of agricultural knowledge.⁹

One of the earliest opportunities to begin post-World War II agrarian reform appeared there in Poland. By her old conservative program,¹⁰ some 6½ million acres had been parceled by 1939 and another 1½ million transferred in settlement of peasants' rights—"servitudes"—but some 15 percent of the arable land still belonged to holdings exceeding 125 acres.¹¹ Critics insisted that many malad-

⁹ [Witold Staniewicz], *Poland* (League of Nations, Publications, European Conference on Rural Life, no. 29, Geneva, 1940), 16.

¹⁰ International Institute of Agriculture, *Annuaire International de Législation Agricole*, 10 (1920): xl-xliii, 693, 704-706, 11 (1921): 1038-1041.

¹¹ Staniewicz, *Poland*, 13-14; and Radwan Jerzy, "Agricultural Reconstruction of Poland," in Bernadotte E. Schmitt, ed., *Poland* (Berkeley and Los Angeles, 1945), 219-231. For Sir E. John Russell's view that some 25 percent of the cultivatable land still remained in large estates, see the Royal Institute of International Affairs, *Agrarian Problems from the Baltic to the Aegean*, 9. For the view that two-thirds of the farm land still belonged to some 16,000 landlords and one-third to 4,000,000 peasants, see Anna Louise Strong, "The Polish Land Reform," *Nation*, 160:122-123 (Feb. 3, 1945).

justments had not been corrected. Even the serious efforts of Poniatowski, the minister of agriculture after 1937, and a determination to break up estates within 16 miles of the border, as a military measure against Germany, left much to be desired. The Polish peasantry was land hungry still and eager to seize such opportunities for land as appeared.

The situation was made worse by World War II, whether in Incorporated Territories (Western Poland), the Government General (Central and Southern Poland), or the Eastern Polish Territories. Polish titles to private properties were endangered, sequestration and confiscation was often required,¹² and many rural properties were transferred to German nationals.

In outlining German policy in Poland, Walter Darre, a former German minister of agriculture, declared that "all the Polish soil and industrial property will be confiscated without exception and will be distributed primarily among worthy members of the Party and soldiers accorded honors for bravery in the war."¹³ In western Poland, which was annexed to Germany and opened for colonization, all Polish-owned estates, it was reported, were confiscated without indemnity.¹⁴

The land was then distributed into two general groupings, reported a student of German occupation policy. The properties of the Polish State and of public Polish corporations and the large private estates were combined and reorganized into domains of over 100 hectares. These estates were run by the German State through a huge corporation usually called *Ostland*. To its 12½ million hectares in west Poland were soon added some 4,000 estates in the Polish Government General where German managers operated with Polish farm hands and up-to-date agricultural machinery.

Some half a million holdings under 100 hectares, the report indicated, were left in most cases for

cultivation by Polish peasants, who were ordered to till them pending ultimate settlement of their fate.¹⁵ Surviving Poles were eager for victory, for a restitution of Polish ownership, and for a redistribution of those estates.

A decree nullifying transfer under German occupation was issued November 30, 1939.¹⁶

Early in 1940 a most significant "Polish Manifesto of Freedom" was signed by the "Freedom" Executive Committee. "The influence of big capitalist and landlord groups on the fate of Poland", it declared, "must be removed through the abolition of large landed estates by means of carrying out of a thorough and immediate agrarian reform . . . and through support of small-scale agriculture. . . ."¹⁷

A "Program for People's Poland", drafted during the last months of 1941 as a result of many meetings between representatives and workers and peasants, declared for the expropriation of the great estates without compensation. Agrarian organization would rest on the basis of independent farms worked by the owners and their families.¹⁸

A declaration establishing the program of General Sekorski's government and confirmed by the national council at its meeting of February 24, 1942, referred specifically to land. "A sound agrarian reform," it said, "ensuring a just partition of land among the peasant population should, with the exception of a limited number of model and experimental farms, create medium-sized but independent, profitable and productive farms worked as a rule by the farmers' households."¹⁹

Upon the invasion of Poland by Russia the two outstanding questions were the division of territory and ownership of land. Presumably Russia would retain Eastern Poland. Her predilection for nationalization of land had been demonstrated. There was no reason to suppose that an exception would be made for this region. Her occupational land policies in regions farther westward could only

¹² For the text of Göring's decree concerning the treatment of the property of citizens of the former Polish state, Sept. 17, 1940, see Raphaël Lemkin, *Axis Rule in Occupied Europe* (Washington, 1944), 511-516. Cf. Frank's Decree Concerning Sequestration of Private Property in the Government General, Jan. 24, 1940, *ibid.*, 531-535.

¹³ Ernest S. Hediger, "Nazi Exploitation of Occupied Europe," *Foreign Policy Reports*, 18(6):73 (June 1, 1942), citing a speech reported to have been delivered to Nazi officials in May 1940.

¹⁴ *Ibid.*, citing the *Bulletin of International News*, Dec. 14, 1940, p. 1611.

¹⁵ Ernest S. Hediger, "Nazi Economic Imperialism," *ibid.*, 18(11):146 (Aug. 15, 1942).

¹⁶ Lemkin, *Axis Rule in Occupied Europe*, 41.

¹⁷ *Journal of Central European Affairs*, 1:98-101 (April 1941).

¹⁸ *Foreign Policy Reports*, 19(17):238-239 (Nov. 15, 1943), where the full translated text, *Program for People's Poland* (New York, 1943), is cited.

¹⁹ *Polish Facts and Figures* (New York), Mar. 10, 1944; and *Polish Review* (New York), 4(17):2 (May 3, 1944).

be surmised. Nationalization was generally expected.

As the Red armies moved into the indisputably Polish part of Poland, however, the world began to hear that the Red revolution which it expected was Green. The Soviet-sponsored Polish Committee of National Liberation published a manifesto in July 1944, calling for a democratic Poland, friendly to Russia, and an agrarian reform program more liberal than radical. It became evident, then, that the Soviet government wanted neither a hostile White nor a too patently Red government in Poland but a Green one. Polish leaders, in turn, in both the Soviet-supported Lublin Government and the English and American supported London Government in Exile agreed on at least one item. Both favored heeding pleas for land.²⁰ President Bierut declared that everybody agreed that land reform was needed, and the vice premier broadcast a plan.²¹

When Poland's "Provisional Government" succeeded the Committee of Liberation one of the very few prewar officials given a place was the minister of agriculture, a former peasant deputy. A comprehensive land reform act was rushed through in September 1944; machinery was set up; hundreds of applications were received and studied; official transfers were being made at large meetings by January 1945;²² and the program was reported to be popular.²³ Land-hungry Poles were beginning to see vistas of "empty" German farmsteads on the western frontier.

A few months later the minister of foreign affairs in Poland's Provisional Government of National Unity was assuring the world that Poland was executing the reform which aimed to westernize rather than Sovietize that country.²⁴ By the summer of 1946 a member of the British Parliament found Poland's land structure completely transformed, much to the disgust of many Poles.²⁵ Further small private ownership, however, was expected to come only after some five or six years of

government operation of some 300 large estates along cooperative lines. Subsequent observers were more optimistic about reform in annexed territory.²⁶ Opponents of Communism could see only corrupt acquisition of large tracts by officials and their friends, accompanied by an overpublicized distribution of insufficient plots of poor land to small impoverished farmers, unaided financially and intentionally destined to succumb to collectivism.²⁷

In Hungary both Liberal and Communist efforts at agrarian reform between wars failed miserably with the advent of the reactionary White Horthy regime and the ten-year effort of Premier Count Bethlen to defeat the movement.²⁸ Vigorous agitation of the question reappeared, however, when the brilliant economist, Dr. Imredy, became premier in 1936 and, following the German lead, began to talk the subject. A somewhat farcical political movement called the Arrow Cross attempted, with some measure of success, to convert peasants to a land-reform program on a nationalist anti-Semitic platform.²⁹

With the opening of the Second World War and a threatened struggle for the control of Hungary, the question of land reform became more acute. Nazi propaganda attempted to win Hungarian peasants by the promise of land reform after the war. Toward the end of the long bitter conflict the Kallay government was replaced by the more definitely collaborationist Sztojay government; the incorporation of Hungary into the German defense system reached its climax about March 1944; and measures promised by previous governments began to be carried out with great speed. There was a fresh levy on Jewish capital and a hurried distribution of Jewish landed property among peasants.

At the same time a vigorous propaganda campaign had been promising the solution of the agricultural problem, and observers believed that some

²⁰ Alexander Werth, "Poland Today . . . The New Lands," *Nation*, 165:309 (Sept. 27, 1947).

²¹ A. K. Adams, "The Economic Policy of the Warsaw Regime," *Polish Review*, 12(11-12):10 (Dec. 20, 1947).

²² Rustem Vambery, "The Tragedy of the Magyars: Revisionism and Nazism," *Foreign Affairs*, 20:482 (April 1942). For a summary of the measures, see Confédération Nationale Hongroise du "Village," *La Réforme agraire en Hongrie et la solution financière de ses problèmes* (Budapest, 1929).

²³ Seton-Watson, *Eastern Europe Between the Wars*, 195.

²⁰ *Foreign Policy Reports*, 21(6):76-77 (June 1, 1945).

²¹ Jan Kwapinski, quoted in the *Polish Review*, 4(30):2 (Aug. 16, 1944). See also Michal Pankiewicz, "Agrarian Reform in Poland," *ibid.*, 3-5.

²² Anna Louise Strong, "The Polish Land Reform," *Nation*, 160:122-123 (Feb. 3, 1945).

²³ *Economist* (London), 148:33-34 (Jan. 13, 1945).

²⁴ *New York Times*, Oct. 24, 1945, 6:4.

²⁵ F. Elwyn Jones, "Poland Revisited," *Fortnightly Review*, 166 (n.s., 160):180 (September 1946).

redistribution of land would probably be declared—if only formally. The whole was designed as an anti-Bolshevik campaign in which peasants were threatened with compulsory collectivization if the Russians should occupy Hungary.³⁰ The entrenched landed aristocracy in time became allied unequivocally with Nazism, however; the Hungarian peasant came to understand that relief would come from no such source; the Arrow Cross was discredited; and the peasantry began to search for a new leadership.³¹ They and their friends pointed out that the existence of some three million agricultural proletarians necessitated the placing of land reform high on the list of political topics to be discussed after the war.

A new agrarian reform was inaugurated in Hungary before the Second World War was over. German occupation on March 19, 1944 had led resistance parties to form the National Independence Front. Soon the tide of battle turned, and half of Hungary was in Russian hands. A provisional Hungarian government of liberation was set up in Debrecen. Elections to a provisional national assembly were held in liberated towns in December 1944; that body met December 21; its political committee selected a premier, and in his coalition cabinet a Communist became the minister of agriculture. It was of this government that Russia demanded a prompt inauguration of agrarian reform. The Hungarians advanced the plea that such a momentous legislative task could not be pushed hurriedly through the National Assembly. But the Russians were firm. The minister of agriculture then published a draft of a proposed land reform bill which was to be discussed by the cabinet soon thereafter. In a number of towns public meetings were held to discuss the bill; political debate on it was begun; preparations for surveying were made; and regional land committees were organized in anticipation of favorable action on the proposal.³² It was reported to London that land-hungry peasants, encouraged by the Russians, had "now started to distribute the large estates among themselves,"³³ and the bill of 1945 soon became law. A few days later Soviet airmen began to drop

leaflets on German-held parts of Hungary telling the peasants that Hungary was free of the land barons.³⁴

By 1945 Hungary was undergoing an unusual awakening. In that old Catholic stronghold the new premier was a former Protestant minister, Zoltan Tildy. Apparently he had the backing of most of the Catholic clergy. The priests now supported many reform measures, instigated not by the peasants but from above, including the breaking up of large estates and large city real estate holdings. In fact it was felt that the preferential treatment of the Church in the proposed Hungarian land reform bill, as in the then recent land reform in liberated Poland, was aimed at gaining the support of the Catholic Church, a strong factor in public opinion in both countries. Further effects of the bill, it was believed, would be to encourage the small-farmer "kulak" strata in Hungary and to abolish large estates there completely.

In the reform program Tildy and his Small Landholder's Party could also make common cause with the Communists. Under him the Communist leader, Matthias Rakoski, retained much power while Soviet Marshal Voroshiloff was said to have the final word on everything.³⁵ Upon his elevation to the presidency early in 1946 Tildy promised "to conserve for all time" the reforms instituted in the preceding year, and by late 1947, according to report, some 8 million acres had been distributed to half a million people.³⁶

Despite an unusually extensive agrarian reform in Rumania a generation ago,³⁷ the land problem there was still alive at the outbreak of World War II. Jews owned more land than was popularly approved; a number of others still owned estates which had not been subjected to reform; and Hungarians, whether they had adopted Hungarian or Rumanian citizenship, claimed that their properties in Transylvania had been over expropriated. In September 1940, a decree passed by the Rumanian Council of Ministers expropriated all Jewish rural landowners.³⁸ As allied armies swept over Europe in 1945, the land problem in Rumania as elsewhere again became acute. In many dis-

³⁰ "Hungarian Transformation Scene," *Economist* (London), 146:572-573 (Apr. 29, 1945).

³¹ Royal Institute of International Affairs, *Agrarian Problems from the Baltic to the Aegean*, 59.

³² Tibor Mende, "Hungary's Road to Freedom," *Fortnightly Review*, 163 (n.s., 157):228-235 (April 1945).

³³ *Economist*, 148:410-411 (Mar. 31, 1945).

³⁴ *New York Times*, Sept. 22, 1946, iv, 7:5.

³⁵ *Ames Daily Tribune* (Iowa), Nov. 27, 1945.

³⁶ *New York Times*, Feb. 2, 1946, 4:4; and *Minneapolis Tribune*, Sept. 21, 1947, 16:1.

³⁷ *Annuaire International de Législation Agricole*, 9 (1919):883-884, 897-906.

³⁸ *New York Times*, Sept. 28, 1940, 2:8.

tricts, it was reported, peasants, encouraged by Communists, seized land illegally. A government amenable to liberal ideas was soon established; the land problem was broached; and an agrarian reform law was dated March 22, 1945.

For a time the Rumanian government maintained that the land reform system was a complete success. It developed, however, that the new law was poorly administered. Early in 1946 Rumania's moderate communist Plowman's Front Government under Premier Petru Groza was forced to study its operation anew and to appoint a committee to study abuses. That body, meeting in January, consisted of Tedor Tanasesou, high court judge; Joseph Sraer, secretary general of the interior ministry; and Nicolae Celae, technical expert in the ministry of agriculture.³⁹

Vested economic, political, and social interests managed to divert the wave of agrarian reform from Germany after the first World War. Storm clouds still threatened, however, in the form of long continued East Prussian depopulation. In an effort to industrialize that old agricultural stronghold, therefore, and thereby to repopulate the region the Nazis proclaimed a fairly radical agrarian reform. One and a half million German industrial workers were to be settled in East Prussia; each was to receive a small allotment of land; and industries were to be supplied with contented workmen. Unfortunately rural regions were not to be supplied adequately with contented cows, with implements, with full-time landowning farmers, nor with adequate sympathy and compensation for former landowners. The movement encountered resistance from the landed aristocracy and from competitive West German industry and obstacles by way of distance of East Prussia from the markets of the central and western areas of the Reich.⁴⁰ In fact, it was reported that nearly half a million independent small German farmers lost their holdings between 1933 and 1941 because of that same effort to divert them to industry.⁴¹

German agrarian reform was long overdue when Hitler arrived. In 1938, it appears, fewer than 7,000 Junker families owned one-quarter of all German farm land, while 3,200,000 German farmers owned less than two-thirds. Only about one-third of the Junker land was productively planted. By many, the division of land was considered im-

portant not only to help peasants but also to break up the Junker class.⁴²

When Russia invaded Germany the Germans issued an order, January 28, 1945, for the evacuation of East Prussia. Most Junkers and their employees moved west into the milling mass in Brandenburg or into the mixture of military and civilian chaos, wreckage, defeat, despair, and death along the highways en route. Others were shot, imprisoned, or deported by the Russians. The land of those who went and of those who remained was expropriated, usually confiscated, ostensibly for distribution to former estate workers and others.⁴³ Paul Braune, German Communist land reform expert, declared that the demand to break up the estates had existed for centuries, and the peasants persuaded the German provincial governments to take the step.⁴⁴

By the end of 1945, it appeared that one of the major postwar steps taken by German provincial authorities with the tacit approval of the Russians in their administration of German territory had been land reform—the breaking up of the big estates, owned largely by militaristic Junkers, and the distribution of the land among peasants who for generations had been something less than share-croppers.⁴⁵

A year later the Russian commander at Frankfurt-an-der-Oder declared that land reform had already proven itself and should soon really come into its own.⁴⁶ In September 1947 Russia reported completion of reform in the Soviet zone.⁴⁷ Neutral observers found Germans divided on the question. Some cooperated; others were less optimistic, little inclined to cooperate in making the plan work, and often critical of over-subdivision. Withdrawal of the U. S. S. R. military, it was believed, would lead to a collapse of land reform.⁴⁸

It remained for friends of Polish expansion to *ibid.*, 167 (n.s., 161):277 (April 1947).

³⁹ *New York Times*, Dec. 30, 1945, I, 6:1.

⁴⁰ Karl Brandt, "Can Germany Ever Feed Its People?" *Saturday Evening Post*, 219(20):20-21, 46, 48, 50, 52 (Nov. 16, 1946).

⁴¹ *Des Moines Register*, Jan. 4, 1946.

⁴² *New York Times*, Dec. 30, 1945, I, 6:1; *Des Moines Register*, Jan. 4, 1946; and A. C. Kanaar, "Land Reform in Germany," *Nineteenth Century and After*, 139:283-286 (June 1946).

⁴³ *New York Times*, Apr. 7, 1947, 10:4.

⁴⁴ *Ibid.*, Sept. 12, 1947 8:6.

⁴⁵ *Ibid.*, Apr. 17, 1947, 8:3; May 26, 1947, 5:1.

⁴⁶ Tibor Mende, "Land Reform in Germany," *Fortnightly Review*, 165 (n.s., 159):170-176 (March 1946).

³⁹ *Ibid.*, Jan. 25, 1946, 6:1.

⁴⁰ Robert Machray, "East Prussia?" *Fortnightly Review*, 159 (n.s., 153):96-103 (February 1943).

⁴¹ Hermann Levy, "Pattern for German Agriculture,"

look for a postwar acquisition of East Prussia, for further expropriation of large estates there, and for an overflow of Poland's surplus population into the sparsely populated area where land could be obtained.

The land question was far less pressing in the American military zone than in that of the U. S. S. R. In Hessen-Nassau, for instance, some 80 percent of the land was already in the hands of small holders. In regions such as Bavaria, however, the administration in the American zone, too, was confronted with a problem of real significance. More than 1,000 estates of over 100 hectares each would be involved; the spirit of the owners was full reactionary, in Junker type; and hordes of refugees were to be cared for. It became necessary to consider the merits of the question.

By way of argument the Communists here also appealed to history, social necessity, the desperate food situation, and the necessity of solving the refugee problem.⁴⁹ Their proposals were quite in line with those for the zone controlled by the U. S. S. R. Some Social Democrats appeared to prefer expropriation and retention by the government with compensation; others favored redistribution but believed 5 hectare units were too small. Christian Socialists, at the other extreme, believed the whole reform proposal was unnecessary.

In the United States little was known of reform proposals in zones occupied by Americans or others. In Congress Senator William Langer was critical of what information he had. Quoting from the land reform directive of the Moscow Conference of Foreign Ministers he termed it ominous and declared that he could not believe that it could have been signed by American representatives. He saw the reforms as the basis for which Russia propagandized her claim to "champion the proletariat and the common man." The United States Senate, he insisted, ought to be given the particulars of just what kind of land reform the United States was a party to in the American and other zones.⁵⁰

Lacking the urgent demand encountered elsewhere and confronted with a diversity of opinion, the military administration in the American zone delayed final action on German amendments to its agrarian reform purposely and became severely criticized for its tardiness by both Germans and Russians.⁵¹ In August 1946, the German Social

Unity leader, Walter Ulbricht, deplored especially what he called this dilatory program, for a large part of which he blamed Minister-President Wilhelm Hoegner of Bavaria. Ulbricht contended that too many "reactionaries and militarists" still were in possession of their extensive lands in Bavaria and that denazification there was lagging woefully.⁵² A month later a land reform law was at last promulgated, still to be submitted, however, to each of the three Laender in the zone for approval, and still pending early in the new year. Russian correspondents touring the American zone pointed out the cattle grazing, spoke of the great undivided farms, and argued that this was why Americans must feed Germany. As the result of land reform, they claimed, the Russian zone produced food both for the Germans and for the occupation forces.⁵³

In the French zone, the Palatinate, the Rhineland, and Württemberg, small holdings predominated also. Most of the 983 estates exceeding 250 acres in area were largely forest; and the Communist origin of the land reform bill rendered it unpalatable to the French. Yet haughty militaristic German families had dangerous records; their power, it appeared, should be broken; and the French saw possibilities in land reform. They therefore framed a law similar to that drawn by the Americans. Whether it was to be enforced remained a question some months later.⁵⁴

To the British the land problem in their zone in Germany first appeared scarcely worth debating. A question was asked in the House of Commons, however, in February 1946, as to whether it was the intention to introduce in the British-controlled zone "a land reform similar to that introduced by the Provincial Administration of Brandenburg, West Pomerania, Mecklenburg and Thuringia." The government held that conditions in the Russian and British zones were not identical and that a land reform of the kind referred to would not meet the situation in the British zone. Elimination of Nazi and military influence was being actively pursued, and the question of the distribution and control of the larger estates was "the subject of special consideration." To the spokesman sanctions against large landowners in the British zone

⁴⁹ *Congressional Record*, 80 Congress, 1 session, June 27, 1947, p. 7980.

⁵¹ *Des Moines Register*, Jan. 27, 1947.

⁵² *New York Times*, Aug. 14, 1946, 7:1.

⁵³ *Ibid.*, Apr. 30, 1947, 11:5.

⁵⁴ *Des Moines Register*, Jan. 27, 1947.

who had supported the Nazi government was "an entirely different question."⁵⁵

Some three months later at least two members again raised the question within three days. One asked the responsible authority if he proposed to take action for the redistribution of land in the British zone as recommended in the Report of the Mission of the World Federation of Trade Unions, led there by Sir Walter Citrine. In reply the former response in regard to conditions being different was cited with the addition that the government policy was not at this stage to break these estates into smaller units, particularly having regard to the pressure of the food situation. Another member pointed out that ever since the war was concluded the Social Democrats in Germany had had a consistent and clear-cut economic program demanding the nationalization of the great industries, the break-up of the big estates, and a capital levy. Again the government agreed that it was not tackling the big estates along the same line as were the Russians. They were owned publicly, in great part, the spokesman elaborated, or were owned by cooperative organizations. They were dealing with some private ones but not as were the Russians—because of economic considerations.⁵⁶

Within another month still another member was asking whether steps had been taken, or were contemplated, "to increase the holdings of peasants in the British zone of occupied Germany at the expense of large estates." This widespread interest on the part of Germans, labor, and Parliament coupled with Russian criticism of British lack of action now brought forth an elaboration by the same responsible official, the Chancellor of the Duchy of Lancaster, John Hynd. "In pursuance of our policy of fostering the revival of the democratic spirit in Germany," announced that worthy, "we are examining the question in consultation with representative anti-Nazi elements of the German population, through a subcommittee of the German Zonal Advisory Council on which the German political parties and trade unions are represented. It is not, however, our intention that any steps should be taken which would impair the efficiency of food production, even temporarily, at the present time."⁵⁷

⁵⁵ Great Britain, Parliament, *The Parliamentary Debates*, ser. 5, House of Commons, Feb. 12, 1946, 419:172-173.

⁵⁶ *Ibid.*, May 8, 10, 1946, 422:1045-1046, 1390, 1402, 1442.

⁵⁷ *Ibid.*, June 4, 1946, 423:1803-1804.

At about the same time, June 1946, General Robertson, commanding, discussed the land policy for which his government had been a target for criticism from Soviet Russia. An interim program had been approved, he explained, by which large estates in the zone would be taken over almost immediately by the German civilian administration pending study of a plan then being framed for the reallocation of the land. The study was expected to take at least a few weeks.⁵⁸

In the meantime, Dr. Kurt Schumacher, chief of the Social Democratic Party in the British zone, was continuing to demand the socialization of industry and agriculture during the period of occupation.⁵⁹ The British, under pressure, took control of estates of more than 500 hectares, considered plans for further steps,⁶⁰ and by April 1947, were able to announce a vast land reform program which at least military officials continued to repeat.⁶¹ Though the plan was summarized in the Commons, however, and the Council of Foreign Ministers, meeting in Moscow, agreed on April 12 that land reform throughout Germany was to be completed by the end of 1947,⁶² British action still lagged. Certain principles to guide the proposed land reform ordinance were repeated in May but were coupled with the declaration that the ordinance was not to be implemented in the near future.⁶³ The British *Fortnightly Review* carried an article declaring it folly to expect that the splitting up of the big estates, especially in East-Elbia, would relieve the situation.⁶⁴

By June the London plan had been compared unofficially with that of the United States, was being made available to members of Parliament, and had reached Germany where it was presented to the German Zonal Advisory Council for comments and advice.⁶⁵ It was reported in the House of Commons that no objections as to the effect on produc-

⁵⁸ *New York Times*, June 15, 1946, 3:6.

⁵⁹ *Ibid.*, June 24, 1946, 6:4.

⁶⁰ *The Parliamentary Debates*, ser. 5, House of Commons, Feb. 26, 1947, 433:2043.

⁶¹ *Ibid.*, Apr. 16, 1947, 436:23-24; *New York Times*, Apr. 3, 1947, 2:7.

⁶² *The Parliamentary Debates*, ser. 5, House of Commons, May 15, 1947, 437:1733; *New York Times*, Apr. 13, 1947, 1:2.

⁶³ *Ibid.*, May 9, 1947, 3:1, May 30, 1947, 6:3.

⁶⁴ Hermann Levy, "Pattern for German Agriculture," *Fortnightly Review*, 167 (n.s., 161):275 (April 1947).

⁶⁵ *The Parliamentary Debates*, ser. 5, House of Commons, June 23, 1947, 439:22.

tion had been received,⁶⁶ and it was believed that the ordinance would be issued early in August substantially as it was received in London. It soon appeared, however, in the Commons and in news dispatches, that land-reform experts in all German parties were in complete agreement that the plan could not be implemented.⁶⁷ In fact, the German Advisory Council completely rejected the plan and failed to agree upon a substitute. Bevan, in turn, when pressed for a promise to have agricultural economists consulted, quipped that in all his experience he had never found unanimity amongst them.⁶⁸ The British, therefore, must perforce decide whether to announce an ordinance deemed unworkable or to develop sadly belated amendments.⁶⁹

Czechoslovakia's rather thoroughgoing interwar agrarian reform was partly undone by German domination.⁷⁰ Konrad Henlein, head of the civil administration for the newly created Protectorate of Bohemia and Moravia, one of the seven subdivisions, stated at Saaz on July 9, 1939, that 150,000 hectares of land would be taken from current Czech owners and "restituted" to the former proprietors.⁷¹ Some three months later the Reich Protector was given the right to confiscate properties of those who had promoted "tendencies inimical to law."⁷²

In Slovakia, which also came under German domination, county courts were authorized to establish a temporary control of those estates over 30 hectares in extent where farming was for any reason jeopardized. Theoretically designed to increase production, the decree was found to be largely political.

The Germans were said to have conducted a "radical" expropriation and resettlement program against Czech farmers whereby entire districts comprising many villages were moved out over night. Their places were taken by Germans who also acquired estates belonging to the Catholic

Church. During 1940 alone, an official German report said, the Deutsche Siedlungs Gesellschaft located at Prague, took over and resettled some 130,000 acres of land "lying principally in border counties where a German element was threatened." It was estimated that after a year of German rule fully 25 percent of the soil was already in German hands. The Czechs claimed that in later years the policy was carried out even more vigorously.⁷³

Hungary incorporated Czechoslovakian Highland Territories and Sub-Carpathia, annulled Czechoslovakian agrarian reforms there, retaining reclaimed estates in the possession of the government in the Highlands, but reallocating to its former Hungarian owners land taken from peasants in Sub-Carpathia.⁷⁴

Post-War II Czechoslovak people were likely to "demand a more effective fulfillment of democratic principles in economic and social spheres." Eduard Beneš, speaking in England on November 21, 1942, said that "We shall institute new and more democratic land reforms, thereby completing reforms dating back to the last war."⁷⁵ Two years later, he pointed out less emphatically that some structural changes were expected and that there was the problem of whether land reform should not be revived and improved. Opposition to the Russian pattern, he found, was pronounced.⁷⁶

With the advance of Allied troops, the liberation of the country, and the return of the government came demand for liberation of the soil and its redistribution in what an able correspondent called "a necessary land reform."⁷⁷ Another correspondent reported: "At a meeting recently held in the town of Humenné in liberated Eastern Slovakia, a demand was voiced by the local population for the confiscation of estates owned by the Hungari-

⁷³ Ján Papánek, *Czechoslovakia* (New York, 1945), 106; and Eugene V. Erdely, *Germany's First European Protectorate: The Fate of the Czechs and Slovaks* (London, 1942), 234.

⁷⁴ Lemkin, *Axis Rule in Occupied Europe*, 149-150. See the text of Order No. 2550/1939 of the Royal Hungarian Ministry, concerning the Transfer of Landed Estates in the Territories Reincorporated into the Hungarian Holy Crown, Mar. 12, 1939, *ibid.*, 372-374; Czechoslovak National Council of America, *News Flashes from Czechoslovakia under Nazi Domination* (Chicago), Release No. 275, Feb. 5, 1945.

⁷⁵ *Ibid.*, Release No. 162, Dec. 7, 1942.

⁷⁶ Eduard Beneš, "Czechoslovakia Plans for Peace," *Foreign Affairs*, 23:26-37 (October 1944).

⁷⁷ Storm Jameson, "The New Czechoslovakia," *Fortnightly Review*, 165 (n.s., 159):76 (February 1946).

⁶⁶ *Ibid.*, July 16, 1947, 440:378-380.

⁶⁷ *New York Times*, July 4, 1947, 5:2; and *The Parliamentary Debates*, ser. 5, House of Commons, July 21, 1947, 440:106-107.

⁶⁸ *Ibid.*, July 23, 1947, 440:1195.

⁶⁹ *New York Times*, July 10, 1947, 2:2.

⁷⁰ *Annuaire International de Législation Agricole*, 9 (1919):909-912, 10 (1920):723-730; and Textor, *Land Reform in Czechoslovakia*, *passim*.

⁷¹ Josef Hanč, "Czechs and Slovaks Since Munich," *Foreign Affairs*, 18:110 (October 1939).

⁷² By a decree dated Oct. 4, 1939. See Lemkin, *Axis Rule in Occupied Europe*, 137.

ans, Germans, and Quislings. These estates were returned to the Hungarian and German aristocracy when Eastern Slovakia was ceded to Hungary in 1939, in order to liquidate the Czechoslovakian land reform which was introduced under the republican regime. The peasants and small farmers now demand new partitioning of these lands among the landless peasantry.⁷⁸ A few weeks later, the Prague radio reported that the agrarian reform agreement, reached by the Czechoslovak government on April 5, 1945, at Košice, and providing for the "wresting of all land from the German and Hungarian gentry" would extend to the entire territory of the republic.⁷⁹

Czechoslovakia set about establishing three types of property ownership: private ownership for agriculture and small business; cooperatives for medium industries; and nationalization of larger business and industries involving some 65 percent of the whole.

Agriculture, declared Dr. Ján Papánek, would remain for the most part in private hands. In Central Europe, he continued, experience had proved that independent farm units are from the point of view of productivity, efficiency, as well as political democracy, the best possible economic and sociological as well as political arrangement. This was given as the reason why the government decided to broaden the land reform act of 1920 and complete the redistribution of agricultural land among landless and almost landless farmers, limiting ownership to 125 acres of arable land.⁸⁰

Subsequently, after two harvests had been matured and reaped under the newest system, land reform still appeared to be popular among the masses.⁸¹

Conservative old Austria, able to maintain her interwar national composure while bowing to urban socialization,⁸² found herself subject to the demands of occupying troops after the Second World

War, in addition to demands of her own peasants. Early in March 1946, Russia demanded some 70,000 acres of well-equipped, medium-sized farms in seventy-six Austrian communities in Burgenland and Lower Austria. Americans objected in the Council of the United Nations Relief and Rehabilitation Administration, and that body, the Russian bloc not participating, agreed as a matter of principle that occupying armies should refrain from requisitioning land and consuming indigenous supplies that could be used for the relief of the nations they liberate.⁸³

The Soviet authorities then shifted their position, though they had already seized certain scattered holdings. They proposed to take some 33,000 hectares, most of which comprised maneuver areas created by wiping out fifty-three Austrian communities during Nazi occupation. They now classed it as German assets; Austrians contended it was still Austrian land.⁸⁴

In Hungary, also, as in Austria, early in 1946 Russian soldiers with good service records received farms and former Hungarian owners were instructed to compensate themselves by taking over farms to be vacated by the Germans whom Hungary was expelling. The fact that Germans, aware of impending expulsion, had failed to plant their farms was ignored.⁸⁵ Subsequently, a land reform was put through. The great estates were divided, and the power of the landed aristocracy was broken.⁸⁶

In Spain the distress of that country's agriculture was regarded as a source of considerable anxiety to the Falange. On January 25, 1940 the government created elaborate machinery for an unlimited number of irrigation and drainage projects by a colonization law designed to increase production and to promote family holdings.

A belated and partially effective interwar agrarian reform was wrecked,⁸⁷ however, by decrees of 1939 and 1940 annulling acts of the Institute of Agrarian Reform from 1936 and ordering the re-

⁷⁸ *News Flashes from Czechoslovakia under Nazi Domination*, Release No. 275, Feb. 5, 1945.

⁷⁹ *Ibid.*, Release No. 293, June 15, 1945, citing a Federal Communications Commission recording.

⁸⁰ *Ibid.*, 7(6):[1-4] (Mar. 15, 1946), quoting Dr. Ján Papánek, Minister Plenipotentiary, Feb. 27, 1946.

⁸¹ *New York Times*, Oct. 26, 1947, vi, 58:3.

⁸² Cf. C. A. Macartney, *The Social Revolution in Austria* (Cambridge, England, 1926), 149, 167-198, 274; and J. Schafer, "Die Agrarfrage in Oesterrich und das sozialdemokratische Agrarprogramm," *Agrar-Probleme*, 2(1):37-72 (1929).

⁸³ *New York Times*, Mar. 14, 1946, 3:4; Mar. 26, 1:3; Mar. 27, 1:4; Mar. 28, 14:3; Mar. 29, 1946, 4:5.

⁸⁴ *Ibid.*, Mar. 30, 1946, 6:4.

⁸⁵ *Ibid.*, Mar. 14, 1946, 3:4.

⁸⁶ Freda Kirchwey, "Behind the Hungarian 'Coup,'" *Nation*, 164:731-732 (June 21, 1947).

⁸⁷ V. Alton Moody, "Spain in Revolt," *Social Forces*, 15:563-569 (May 1937). For the text of the basic law of Sept. 15, 1932, see *Annuaire International de Législation Agricole*, 22(1932):1277-1296.

turn of land to the grandees.⁸⁸ Then a change of policy appeared to be approved. Contemporary with British and American pressure for a more democratic Spain a "1946 program for liberalizing the regime" was set up. Announcing successive five-year plans for Spain, Franco, in 1945, speaking "in a city where there are many landed proprietors," implied the breakup of estates. He assured distressed Estramadurans that their redemption was at hand, that unemployment would disappear, and that "old injustices and abuses would be ended."⁸⁹

After studying the effect of Franco's announcement the cabinet adopted a resolution expropriating some areas for division among farm laborers. First expropriations were expected in the Estramadura area where there were 4,500 farm laborers.⁹⁰ A year later Franco admitted dissatisfaction with conditions under his regime, hoped for a solution of economic problems, and stated his aims to improve the peasants' lot.⁹¹

In Yugoslavia a provisional parliament, meeting in August 1945, recognized the inadequacy of even a fairly comprehensive reform program adopted soon after World War I.⁹² It, therefore, passed a new agrarian reform and settlement law based upon principles which were to be reiterated in the Constituent Assembly's new constitution of January 31, 1946. Land, it was declared, belongs to those who till it. Despite experiments with collectives and certain aid and privileges extended to cooperatives it was specifically stated that the state would particularly protect the owners of small and medium-sized landholdings.⁹³

Observers still entertained a suspicion that Yugoslavia would resort to collectives. In November 1946 a correspondent for the *New York Times* reported an interview with Marshal Tito and an extended one with Andrya Hebrang, chair-

man of Yugoslavia's planning commission. Both denied any intention of collectivization of land. But other government leaders, he reported, including the labor boss, Juro Salaj, indicated that it was contemplated, and the peasants feared it.⁹⁴ In fact a bill nationalizing the entire Yugoslav economy was presented to the Yugoslav assembly in December and was passed unanimously.⁹⁵

Nearby Bulgaria provided, as after World War I, that land should be held by those who cultivated it.⁹⁶

Despite a notable interwar agrarian reform,⁹⁷ the demand for land in Finland was great, after her war with Russia, as a result of the reluctance of Finns in ceded regions to lose their Finnish citizenship. The U.S.S.R. agreed that those willing to accept Russian citizenship might retain their homes and property; those who adopted Finnish citizenship must lose. Only about 1,000 elected to remain in ceded territory as Russian citizens. Finland hoped to offer homes to the rest.

In March 1940, the Finnish government made a preliminary survey and began mapping "the greatest land reform program in Finnish history" to provide homes for 340,000 Finnish farm residents removed from areas ceded to Russia under terms of the peace treaty. The minister of agriculture, Juhe Kolvisto, discussed government plans and stated that an agrarian reform bill would be introduced in Parliament.⁹⁸

Each of the other Baltic countries had also executed sweeping post-World War I agrarian reforms. Upon their occupation by Russia in 1940, the minister of education in Estonia declared on June 21 that there was no intention of establishing the Soviet regime there, and the deputy prime minister insisted in a radio speech that "honestly acquired private property would be safeguarded." Subsequently, new assemblies were elected in Latvia, Lithuania, and Estonia; each became a Soviet Socialist Republic and each proclaimed its landed property nationalized, and ordered it

⁸⁸ *New York Times*, Mar. 7, 1940; *Annuaire International de Législation Agricole*, 30(1940):425-426; and A. Randle Elliott, "Spain After Civil War," *Foreign Policy Reports*, 16(5):63 (May 15, 1940).

⁸⁹ *New York Times*, Dec. 21, 1945, 5:4.

⁹⁰ *Ibid.*, Dec. 22, 1945, 20:4.

⁹¹ *Ibid.*, Oct. 2, 1946, 15:5; Oct. 3, 1946, 17:6.

⁹² Cf. Milan Ivšić, *Les Problèmes agraires en Yougoslavie* (Paris, 1926), 99-107, and *passim*; and *Proceedings of the Commission on the Constitution, Appointed by the Constituent Assembly* (Zagreb, 1921).

⁹³ Alex N. Dragnich, "Yugoslavia's New Constitution," *Current History*, 10:420-423 (May 1946).

⁹⁴ *New York Times*, Nov. 12, 1946, 16:2.

⁹⁵ *Time*, 48(25):37 (Dec. 16, 1946).

⁹⁶ Edgar P. Young, "People's Republic, Bulgaria," *Contemporary Review*, 171:163 (March 1947).

⁹⁷ Finnish Government, *Land Reform in Finland, Official Statement*, 1922 (Helsingfors, 1925); *International Yearbook of Agricultural Statistics, 1930-1933*, tables 437-438, p. 755.

⁹⁸ *New York Times*, Mar. 30, 1940, 6:2.

allotted to peasants. Critics charged, however, that the Bolsheviks were merely encouraging collectivization by creating conditions making small holding virtually impossible. A year later the outbreak of the Russo-German War brought to the Baltic nations German control accompanied by promises that private property would be restored. Actually that property was proclaimed nationalized as captured government property. At the end of the German occupation, only 12 percent of the land confiscated by the Russians in Estonia had been returned to its owners, 24 percent in Latvia, and 6 percent in Lithuania. The remainder of the land was being retained for postwar distribution to German soldier-colonists.⁹⁹ Upon the recapture of the Baltic regions by the Russians in 1944 an agrarian reform more drastic than that of 1941 was ordered, and again obstacles to private ownership were placed to aid collectives.

Italy was a peasant country; much of the land was held in great estates; and the problems connected with the land were admittedly of fundamental importance in any plan of reconstruction. Yet perhaps no effort at a far-reaching reform program was to be expected there. Despite much misery, dissatisfaction, agitation, and temporary success, efforts at reform were defeated after World War I; and practically everybody agreed, claimed Mario Einaudi, that no sweeping solution of the agrarian question could be found. General agrarian reform in the usual sense, he continued, would not solve the problem in Italy, and the upsetting of the delicately balanced agriculture of the plains of Lombardy and of the share

cropper farms of Tuscany and Piedmont would be a serious mistake. Reclamation appeared to offer the greatest promise again as it had in the battle of grain a few years earlier.¹⁰⁰

Mayor Fiorello H. La Guardia, however, while admitting that it was none of his business, urged redistribution. Peasants north of Rome, taking a leaf from the lives of the Sicilians of a generation earlier, distributed among themselves some 600 acres, belonging mainly to Prince Torlonia. Renewed illegal occupation of land by landless peasants in Sicily led to a new outbreak of peasant unrest there in the fall of 1946.¹⁰¹

There is no doubt then that the post-War II resurgence of agrarian reform was widespread. Russia tentatively permitted Poland to show green rather than red. In Hungary small landholders gained the support of Communists to secure a program of individual ownership. Such a program was formulated throughout Germany and completed early in the Russian-occupied zone and promised by the end of 1947 in other zones. Under democratic pressure, fascist Spain instituted a liberal land-reform program. In some countries, partisan agitation resulted in little action, while Italy alone practically rejected redistribution.

European serfdom had long since disappeared, and two twentieth-century waves of agrarian reform had removed many of its vestiges; but inequalities still remained. Now the uncertain actions of countries such as Yugoslavia pointed a new significance in the old problem of the underlanded and the landless, as they too became a factor in the struggle between East and West.

⁹⁹ An Estonian Woman (Aino Kallas), "Estonia 1940-41," *Nineteenth Century and After*, 139:40-48 (January 1946); and Endel Kareda, *Technique of Economic Sovietisation, A Baltic Experience* (London, 1947), 17-19, 22, 114, 116-117.

¹⁰⁰ Mario Einaudi, "The Economic Reconstruction of Italy," *Foreign Affairs*, 22:304 (January 1944); and Victor B. Sullam, "Recent Developments in Italian Agriculture," *Foreign Agriculture*, 9:72-74 (May 1945).

¹⁰¹ *New York Times*, July 25, 1946, 12:4; Aug. 14, 1946, 10:7; Oct. 31, 1946, 2:4.

AGRICULTURE IN THE UNDRAINED BASIN OF ASIA

GEORGE W. ANDERSON

Department of History, University of Minnesota

The present-day republics of Central Asia occupy the territory of the several khanates which existed there previous to the Russian advance and embrace two-thirds of the area geographically known as Turkestan.¹ They comprise the last territory conquered by the Russian Empire. Even before its complete conquest, the territory was organized into a military governor-generalship consisting of three *oblasts* or regions, Syr-Darya, Samarkand, and Fergana, each under a military governor. Later, after more territory was absorbed, two additional *oblasts* were added, Trans-Caspia and Semirechie. To the end of the Imperial government, they remained under military rule. The military governors were motivated by strategic considerations which determined the emphasis placed on the various products of the region. These considerations have remained under the Soviets, only in more emphatic form.

Part of Turkestan is outside Russia, but for the purpose of this paper it will be sufficient to deal with the Russian zone, for it completely influenced the life of the immediately adjacent territories. Besides, it must be borne in mind that in the so-called Eastern or Chinese Turkestan, especially in the southern part, agriculture is possible only in the oases, and the land capable of producing any crops is a little less than one seventy-fifth of the total area.

Geologically speaking, Turkestan is part of the undrained region of Asia which was left after the evaporation of the tremendous inland sea. This particular area is the only place in the world where several great streams flow, not into the ocean, but toward the middle of a continent. One of these streams, the Volga, empties into the Caspian Sea; two others, the Amu Darya and the Syr Darya, flow into the Sea of Aral; and a fourth, the Ili, not as large as the other three but still a great river, feeds Lake Balkhash. There are innumerable smaller streams, originating in a semicircle

of mountains to the south and east of Turkestan, which flow into the deserts and disappear in the sands. For some time past an equilibrium has existed between precipitation and evaporation, but the situation is precarious because, in the event of a prolonged drought, everything would dry up, and the consequences would be very disastrous. By and large, the region is either semiarid or a complete desert, and in many places there is not enough water to support life.

However, not all of the terrain in Turkestan is bad land. There are tremendous stretches of steppes producing fine grasses and adaptable for raising certain grains. The mountains in the east and southeast abound in remarkably fertile valleys. Even the deserts are covered by silt from the rivers, and the loess or fertile sand is wonderfully fecund when irrigated. Because of the fertile soil, agriculture never completely dies out, even in the deserts of Turkomania, and the cultivation of grains, which many scholars believe originated in old Khorezm, survives in the oases of western and southwestern Turkestan.

In the whole area which stretches 800 miles from north to south and 1,200 miles from east to west, there are bound to be some variations in climate. Generally, the range of temperatures is extreme. The desert regions surrounding the Aral Sea are noted for the greatest range between cold and heat to be found anywhere on earth. There are recorded temperatures of close to 125 degrees Fahrenheit in the summer, and minus 70 degrees Fahrenheit in the winter. In addition to the extreme cold, the desert of Ust Urt is known for its frightful winter storms, which contain very little snow but consist of clouds of particles of ice-covered sand driven by terrific gales. However, the valleys of Fergana and Samarkand generally possess a mild climate and are adaptable to the cultivation of delicate plants. But even here, very hot summer days occur with relief coming only after sundown.

Under Nicholas II Turkestan was expected to fill a hiatus in a Russian economic system whose main motivation was the principle of self-suf-

¹ This article was presented at the meeting of the Agricultural History Society with the American Historical Association at Cleveland on Dec. 27, 1947.

ficiency. Russia was being rapidly industrialized, and its textile industry in particular was making remarkable strides. The Russian government had become keenly conscious of the importance of industrialization, and was aware that industrialization constituted a sinew of power necessary for any country as great as their own empire and as ambitious as it was to compete in world markets. They realized, however, that they were a landlocked power and could easily find themselves deprived of indispensable raw materials. Therefore, it was a paramount consideration to assure an uninterrupted supply of strategic raw materials. They could only be secured if the sources of supply lay within Russia's own borders.

In developing the place of Turkestan in the Russian economy the government had a threefold program: first, to establish a dependable source of specific raw materials; second, to create a market for Russian industrial products; and third, to make it a base for commercial and undoubtedly also political penetration into neighboring states. Thus, from the very beginning, stress was laid on the development of the occupations which already existed and which could at the same time immediately benefit Russian industry.

By far the most valuable product, from the economic standpoint, was cotton, which had long been cultivated and which became the paramount economic consideration, because it promised independence for the Russian textile industry from imports. Cotton fitted very well into the administrative organization of Turkestan, for the three original administrative *oblasts* made up the territory known to the natives as the Doab, that is, "the region of two rivers," which already was producing a considerable amount of this much needed crop.

Once cognizant of the possibilities of cotton raising in Turkestan, the Russian government began a determined program for its cultivation by the natives. In this program it was anxious both to increase the acreage under cotton and to improve the quality of the crop and the yield per acre. This policy was so determined in its application that it aroused accusations of utter ruthlessness in exploitation of the natives, especially the Uzbeks and the Tadjiks, by deliberately forcing them to limit themselves to one crop, and then making them merely tenant farmers. Some of the criticism of the Russian cotton policy was unquestionably justified, for it did exploit the

natives. Obviously it would have been a waste of time and effort for Russian immigrants to attempt to grow cotton, for they were utterly unfamiliar with its cultivation.² Therefore, cotton growing was left to the Uzbeks and Tadjiks who were led to believe that it would be to their advantage to concentrate on this one crop and to discard completely all others.³ However, due to fluctuations in the market price, the growers again and again found themselves in stringent financial circumstances, and were forced to mortgage their future crops, sometimes two or even three years in advance. Invariably made by banks, these loans, taking into account the general poverty of the natives, must have been very numerous. The Bank of Kokand alone advanced an average of over \$20,000 a year.⁴ It was an easy matter for the bank to acquire the land through foreclosure when the payments could not be met promptly. Once the land was in the possession of a bank, it could keep the former owner as a tenant and order him to cultivate what it deemed most advisable. The result was to bind the natives to the cultivation of cotton.⁵ Though this exploitation of the natives was inexcusable, it was not as widespread as has been claimed, and it did not account for the increase of the area under cotton cultivation.

This increase was undeniably due to the opening of new lands, either by extensive irrigation or in districts especially suited to the cultivation of cotton. Examination of the respective acreages in the three original regions demonstrates this conclusion. The area under cotton in 1908 in

² *Economic Review of the Turkestan Region* (Ashkhabad, 1913), 44.

³ One should bear in mind that the Soviet regime, though perhaps the severest critic of the Imperial cotton policy, itself pursued an identical course in trying to increase the cotton acreage at the expense of other crops, especially wheat.

⁴ *The Report of Count K. K. Pahlen*, judiciary, section on the notary public, *passim*.

⁵ E. Dravkina, *Natsionalny i Kolonialny vopros v Tsarskoy Rossii* [National and Colonial Question in Tsarist Russia]. As a parallel the Soviet government, after the collectivization of agriculture in Uzbekistan, apparently promoted the same one-crop cotton economy, importing the necessary wheat from other regions of the Union. By controlling the relative prices of wheat and cotton, it could achieve in practice the same ends as the Imperial government, and perhaps even more handily!

Samarkand was slightly over 59,000 acres, in Syr-Darya a little under 65,000, and in Fergana 456,000. In 1910 the increase in Samarkand was less than 1,000 acres, in Syr-Darya it rose to 76,500, and in Fergana it went considerably beyond 800,000—almost a 100 percent increase.⁶ The increase in Fergana was due exclusively to the newly irrigated lands in the districts where the cultivation of other crops new to the natives would have presented an infinitely greater hazard. However, in the lower Zarefshan Valley in Samarkand, which, although admirably suited to the cultivation of cotton, offered opportunities for other more lucrative crops, the increase in the area under cotton was practically negligible. To a slightly less degree the same condition prevailed in Syr-Darya.

The Imperial government made a definite effort to cultivate not only varieties of cotton best suited to the climate of Turkestan but also those producing the finest staple. It kept in close touch with the United States Department of Agriculture, asking for samples of American cotton seed, information regarding types of staple, and advice in general. It was also very cooperative in offering the United States its experience with American cotton, as well as with other crops such as wheat, which were of interest to American growers.

In spite of all the criticism that this policy had received, there was a steady increase in the production of Turkestan-grown cotton, which by 1913 amounted to over 23,000,000 poods.⁷ Today the Soviet crop in Turkestan far exceeds the total of that formerly grown, plus what had to be imported, and makes the Soviet textile industry completely independent of foreign supplies, thus corroborating the wisdom and correct calculation of the Imperial government.

The development of the cotton industry was centered in the region of the Doab, that is, the region of the Amu- and Syr-Darya rivers in the three original provinces. Although it was of primary importance, it did not remain the sole preoccupation of the Russians. Gradually, new possibilities became apparent and were exploited. The change came after the accession of Nicholas II with a constantly increasing flow of Russians first into Siberia and thence southward into Semirechie

and even into the Doab. To these emigrants cotton was of no interest because they knew nothing about it, but they were ready and anxious to try to grow on their new farms the crops with which they had been familiar in Russia.⁸

Their attempts to raise familiar Russian crops proved unexpectedly successful and resulted in opening up new lands to cultivation in Turkestan. First, the region around Verny proved to be as good an agricultural district as could be desired, and then the whole of Semirechie was found to be adapted to the growing of rye, barley, and, what was most important, wheat. The Russian government was exceedingly careful to settle emigrants on lands suited primarily for the cultivation of these crops, leaving cotton to the natives.⁹ By 1908 and 1909 the newcomers were practically the only ones who were growing wheat and rye. They had even started raising potatoes, a crop new to Turkestan. By 1910, a very short time after their introduction, the potato crop was close to half a million tons, apparently sufficient for the needs of the emigrant population. At that time it was too early to predict to what extent the crop could be increased so as to provide a surplus for export. The answer lay in the size of the area available for cultivation, which was limited only by the supply of water. Although the percentage of small grains and potatoes raised in Turkestan was relatively low, nevertheless it was of importance in that it was produced by a small number of people on the relatively small acreage that was irrigated, thus disclosing a considerable potentiality for increasing the harvest when more land could be supplied with water.

By 1905-1914, the Doab had become a veritable California, attracting more and more Russian immigrants who saw the possibilities of engaging in specialized farming. The hot rainless summers and the loess soil that needed only water to make anything spring to life proved a veritable boon in the cultivation of an entirely new industry for Turkestan, namely fruit growing. Such fruits as peaches, apricots, grapes, and pomegranates had always been grown in Turkestan, but primarily for local consumption. Only a relatively small

⁸ *Zadachi Rossii v Sredney Azii v svyazi s voprosom o provedenii Sredneaziatskoy zheleznoy dorogi* [Russia's Problems in Middle Asia in Conjunction with the Building of the Middle Asian Railway] (St. Petersburg, 1900), introduction.

⁹ *Ibid.*, *passim*.

⁶ *The Russian Year-Book*, ed. by H. P. Kennard (New York, 1912), 122.

⁷ *Ibid.*, 1914, 139. One pood is 36 pounds avoirdupois.

portion of the fruit crop was dried, and only a part of this was shipped out for sale elsewhere. It took Russian-trained horticulturists to appreciate the unusual qualities of these fruits, their size, flavor, and ability to withstand deterioration, which made them peculiarly adaptable to export. It would have been futile to develop additional gardens when the produce of those already established could not be taken care of and was going to waste. The reason, of course, was in the lack of transportation facilities. Even after the Trans-Caspian Railway had been extended into the valley of Fergana in 1895, it reached only a portion of the fruit-producing area. Moreover, it did not possess the necessary equipment to carry quantities of fresh fruit which were so perishable, such as cherries, peaches, and apricots. Excellent as they were, they could not be moved great distances in very hot weather, and the speed of a freight train on the Trans-Caspian Railway was notoriously slow. With the conditions as they were before 1906 the development of horticulture was necessarily delayed until its produce could be delivered to market quickly and relatively cheaply. The answer to this was a direct rail communication with European Russia. When that came it had a definite influence not only on fruit growing but also on the closely related industry of wine making.¹⁰

The three original *oblasts* of Turkestan, Syrdarya, Samarkand, and Fergana, comprised one of the best wine districts of Russia and one which in point of climate was the most favorable portion of the empire for the cultivation of the grapevine.¹¹ Dry summers with much sunshine, hot days, and cool nights were conducive to producing excellent fruit, large in size and of fine quality. The wine industry, however, was carried on in an exceedingly primitive manner, and then only by the Russians. It must be remembered that the natives were almost all Moslems, who were prohibited by the Koran from drinking wine. Consequently, they usually were not interested in making wine from their grapes, but preferred to dry and export them as raisins.

By 1908 the total area under grapevine cultivation in Turkestan was about 65,000 acres. About 87 percent of this acreage, or more than 56,000

acres, was controlled by the Russians. The average number of vines per acre was 335, each vine producing about 40 pounds of grapes. It would probably be correct to say that the average yield per acre was around 13,000 pounds both in the native vineyards and in those cultivated by the Russians for wine production only. Usually 70 percent of the grape crop was used for wine, 15 percent was sold fresh, and 15 percent was dried and sold as raisins. The wine produced was light, such as sherry (from Persian Shiraz) and muscatel, and was noted for a very excellent flavor. None of it was consumed locally. It was all exported because of the consistent demand for it outside of Turkestan. In spite of its fine quality, however, it brought the lowest price of any Russian wine, which was manifestly unjust. With the exception of the wines produced in the appanage estates, under the supervision of the best available winegrowers, it was at least equal in quality to most of those made in the Crimea and the Caucasus.¹²

It must be realized that grapes in Turkestan ripened earlier than in the Crimea. In spite of the slowness of the Trans-Caspian Railway and the necessity of shipping them across the Caspian Sea, they could be placed on the market two weeks earlier than those from other regions. This prompted the more enterprising of the grape growers to change to varieties which produced larger crops, were adaptable for transportation, and commanded a ready market as fresh fruit. The result was a great improvement in the per-acre yield of many vineyards, the average now being more than double the earlier yield. The ratio of grapes used for production of wine to those sold fresh began to change, the former going steadily down as the latter rose. With the completion of the direct rail line from Tashkent to Orenburg, and thence to Moscow and Saint Petersburg, the incentive to increase wine production in Turkestan suffered an even more marked setback. As a result of the direct contact with the distributors of fresh fruit, the net profit to the grape growers catering to this new market was considerably greater than they had received as vintners. This tendency was very much deplored by all experts of wine production because, as has been indicated, Turkestan was unusually well suited to the growth of fine wine grapes of practically all known varieties.

The railroad, although detrimental to the wine

¹⁰ W. Rickmer Rickmers, *Impressions of the Duab, Russian Turkestan* (Royal Central Asian Society, Proceedings, London, 1907).

¹¹ *The Russian Year-Book*, 1912, 144.

¹² *Ibid.*

industry, was very beneficial to growers of other fruits. Although grape growers were the first to benefit from selling their produce as fresh fruit in Moscow and Saint Petersburg after they had learned to pack it properly, it was not long before it was found possible to ship more perishable fruits. The use of specially constructed cars, the far greater speed of freight trains on the Tashkent-Orenburg line, completed in 1906, and especially greater experience in handling fresh fruit for shipment, all combined to stimulate the development of horticulture. In a very short time European customers began to appreciate the exceptional qualities of Turkestan fruit. Turkestan peaches, apricots, and pomegranates already were without rivals anywhere in the world, and soon other fruits such as cherries and quinces won places on the European market. Even the northern regions of Turkestan, in Syr-Darya and Semirechie, found it profitable to grow apples and pears which could successfully compete with those grown in the Crimea and Bessarabia. In a few years Turkestan replaced the Crimea as the leading exporter of fruit. In 1910, a very poor fruit year everywhere in Russia, shipments from Turkestan exceeded 645,000 hundredweight.¹³ The potentialities of this industry could have been developed considerably further. There still was much to be desired in the building of a proper organization of fruit growers, and the extension of territory for the development of new orchards needed only enterprising men on lands newly opened by irrigation. The development of this industry extended even into the oases along the Trans-Caspian Railway, where the appanage estates developed truly remarkable cherry orchards.

One other crop, namely rice, deserves mention because of its importance in the eyes of most Asiatic peoples. Long before the Russian advance, the khans in what is now Turkestan made strenuous efforts to cultivate this particular cereal. But somehow they never attained any success, and invariably they completely ruined the soil of the rice paddy for any further cultivation. The result was always the same; after two or three years of cultivation the paddy became a salt swamp, utterly useless for anything else. In the desert where land capable of being irrigated is very limited and therefore quite valuable, even the khans recognized that these experiments were too costly to be continued.

¹³ *Ibid.*, 138.

It must be noted that these conditions existed exclusively in the khanates situated in what was Trans-Caspia and Samarkand and in the lower reaches of the Amu-Darya where the khans practiced a method of irrigation comparable to that of Egypt and the desert regions of India.¹⁴ The attempts to grow rice in a few regions of Fergana, although somewhat more successful, were too limited to be of any importance.

It was the Russian agriculturists who determined the cause of the failures and developed rice culture in districts where the crop could be grown. Rice grows in swamps, and therefore the paddies of Turkestan were constructed so that they were covered with water which was left standing on the land until the crop was ready for harvest. However, during this time the water had a chance to permeate completely the layer of loess and penetrate into the subsoil which was the bed of the original inland sea that receded millenia ago. After a few years salt from the subsoil diffused through the layer of loess and rendered it useless for agriculture.¹⁵ In Fergana there was no possibility of flooding the paddies permanently owing to the peculiar contour of the terrain, and the water had to be carried periodically to the plantations by means of *aryks* or irrigation canals. These gave sufficient moisture to the layer of loess, but each period of watering was too short to permit water to penetrate the subsoil. This discovery permitted agricultural and irrigation experts gradually to develop a fairly large area in Fergana that was well adapted for the growth of rice. By 1912 the paddies covered in excess of 110,000 acres which produced a very good harvest but not nearly sufficient to satisfy the needs of the natives. The Russian government, however, preferred to import the necessary supplement of rice from the adjacent province of Khorosan in Persia, where it even subsidized the local population to grow this crop and thus retain the available area in Fergana for the cultivation of cotton.¹⁶

From what has already been said about agriculture in Turkestan, the all-pervading importance of water and its proper usage can be readily understood. Like California and Arizona, it is a desert country where the soil, an accumulation of centuries

¹⁴ A. Woeikof [A. O. Voëtkov], *Le Turkestan Russe* (Paris, 1914), 228.

¹⁵ *Ibid.*

¹⁶ *Ibid.*, 229; M. I. D. Consular Reports, Report of the Consul at Meshed for 1913.

of alluvial deposits, needs only to be revitalized by moisture to raise crops. For all practical purposes there is no rainfall in Turkestan except in the mountains, where it comes usually as violent storms filling the beds of streams, causing torrents of water to rush toward the plains, often resulting in considerable damage. The only reliable supply of water is from large rivers and small streams fed by the melting snows of the mountains during the warm seasons. This requires very careful husbanding of the water because, due to the exceedingly great heat of the summer and the very light soil, practically all the streams and rivers fail to reach any definite destination, but gradually disappear in the sand. The incredible amount of water lost in the desert can be judged by the fact that even so large a river as the Zarefshan, which should be the most important tributary of the Amu-Darya, never reaches the latter, but is lost in the sands of western Samarkand.¹⁷ This situation was recognized by the natives who themselves developed quite an elaborate system of irrigation canals, called *keriz* and *aryks*, and established a definite system of control over the water supply.

The *keriz* are underground irrigation canals, and they are found only in Trans-Caspia, where the nature of the water supply is entirely different than in the central and eastern parts of Turkestan, where the main supply is dependent on great rivers and streams which have their sources in the snow-covered mountains of Tien-Shan and in Pamir. The hotter the summer, the greater is the melting of the snows which feed these streams, and thus there is a constant supply of water at a time when it is most needed. In Trans-Caspia, on the other hand, the two main rivers, Murgab and Tedjend, as well as all the minor streams, flow from relatively low mountain ranges, and the water level is dependent on the amount of rainfall which in the summer, unfortunately, is very meager. Because of this the natives invented a most ingenious method of preventing evaporation by conducting the water through underground canals called *keriz*. Because of their low level it is practically always necessary to resort to pumps to deliver the water to fields and gardens. Though very remarkable in construction, they are, nevertheless, not without danger as they tend to undermine the earth under which they flow, and the unwary passerby may

find himself engulfed in an unexpected predicament from which it is very difficult to extricate himself before he is swept farther into the tunnel.¹⁸

Elsewhere than in Trans-Caspia it is not necessary to take such precautions to preserve the water supply, so that *aryks* or open irrigation canals sufficed. Because the current of the water in all the *aryks* was very rapid, any additional load, as for instance after a storm in the mountains, caused great damage in the soft soil of Turkestan. To prevent this erosion the Russian engineers evolved quite an efficacious system of locks. Moreover, in order to save as much water as possible in the main canals and to prevent its seepage, concrete was used to line them wherever necessary. Not a small problem was the equal distribution of the fast-flowing water among the population. It was very easy to deflect water into any one field by building an improvised dam in a strategic place. With a well-placed bribe it was very easy for the well-to-do to steal water by this device, thereby depriving the rest of their fair share.¹⁹

The control of water became increasingly important because of the growth of agriculture and the necessity of opening more and more land for cultivation. In that, the government was of course vitally interested, and spent a considerable amount of money digging main irrigation canals. At first the funds came from its own budget; later, local taxes were collected in order to extend the system of subsidiary *aryks*. By 1910 irrigation had been extended to all regions of Turkestan, and considerable new lands were thereby opened to wheat growing in the north, cotton in Fergana and Trans-Caspia, and fruits in the Doab and in the oases along the Afghan border.

Today, all the emphasis is placed on the growing of cotton which has become, practically speaking, the staple crop of Turkestan. It is difficult, if not impossible, to say how much it has encroached on the acreage of other crops, but, so far as I have been able to ascertain, all the newly opened lands have been put under cotton. Its importance can be appreciated only by keeping in mind one all-important fact, namely, everything that grows in Turkestan depends on the available supply of water.

¹⁸ Woeikof, *Le Turkestan Russe*, 224-227.

¹⁹ *The Report of Count K. K. Pahlen*, oblast, administration, 39.

¹⁷ Rickmers, *Impressions of the Duab*.

RAILROAD SERVICE TO VIRGINIA FARMERS, 1828-1860

CHARLES W. TURNER

Department of History, Washington and Lee University

The seventeen railroad companies of ante-bellum Virginia, forming an east-coast rail line that penetrated into the back country, were economically valuable to the State.¹ From 1828 to 1845 they were considered supplementary to canals and navigable rivers, furnishing links where it was impossible to secure them any other way, and it was not thought that they would supplant water transportation and communication. These roads were private undertakings, generously supported by the State which took three-fifths of the capital stock by 1860. From the start they secured very liberal charters. In the years 1845-1860, new lines were built, and in union with the older lines, they began to form a western Virginia railroad system. The roads remained separate units, but some of them worked out means of exchanging passengers and freight.

The railroads rendered service to Virginia in a number of ways. They provided transportation at cheaper costs, kept regular schedules, provided special favors for their customers, increased land values and population, and raised the State income. These topics will be developed in this study, using several companies as examples. In conclusion, comparisons will be drawn between the Virginia railroad system and that of other States.

Each legislative charter designated certain fares and freight rates to be charged. In the early charters the charges were generally 8 cents a passenger-mile and 10 cents for freight per ton-mile. After 1845 the rates were as low as 6 cents for

passengers and 4 cents for freight. All changes in the rates had to be approved by the Board of Public Works. The fares and tolls varied in different sections, depending on the number of railroads in the area and the other modes of transportation. From the beginning the fares were gradually lowered, but they still remained higher than the rates which the majority of the railroads in the Eastern States charged in 1860. There were several reasons for this. Many of the lines were short; frequent stops were made for passengers; and passenger business rarely equalled the freight business.

Fares and Schedules. The first to be examined in detail with reference to its service is the Petersburg and Roanoke Railroad. The first daily trips were made over the 59-mile line in 2½ hours, carrying 18 to 20 tons of passengers and freight.² Starting at 7 a.m. from Petersburg and returning from Blakely at 6 p.m. on the same day at a speed of 20 miles per hour, the train stopped at 7 or 8 depots along the line. If any other stops were made for passengers, an extra charge of 50 cents was generally made. Some 8 locomotives and 20 cars were used daily by 1838, and the General Assembly permitted them to effect the transportation for a North Carolina road, the Greensville and Roanoke Railroad.³ This meant that the rolling stock of the Petersburg and Roanoke could be used on the North Carolina line's track. This is an early example of interstate cooperation among steam railroads.⁴ More stations were added, interest was bought in a steamship company, and more trains were placed in service to accommodate the public. By 1847 the train left Petersburg at 8:30 a.m., and the fare one way was \$5.00 for the total distance.⁵ The service offered by the Ports-

¹ The seventeen railroad lines by 1860 were: the Alexandria, Loudoun, and Hampshire; the Baltimore and Ohio; the Norfolk and Petersburg; the Orange and Alexandria; the Portsmouth and Roanoke; the Richmond and Petersburg; the Richmond and Danville; the Richmond, Fredericksburg, and Potomac; the Virginia and Tennessee; the Winchester and Potomac; the Chesterfield; the Louisa; the Southside; the Seaboard and Roanoke; the Manassas Gap; the York River; and the Petersburg and Roanoke. See Balthasar Henry Meyer, ed., *History of Transportation in the United States Before 1860*, by Caroline E. MacGill and collaborators (Carnegie Institution of Washington, *Publication 215C*, Washington, 1917), 462.

² *American Railway Journal*, Jan. 5, 1833.

³ *American Beacon* (Petersburg), Aug. 24, 1837.

⁴ Virginia General Assembly, House of Delegates, *Documents*, 1836, doc. 16, 4-9.

⁵ Virginia Board of Public Works, *Annual Report of the Board of Public Works to the General Assembly of Virginia . . .*, 26-27:647. Hereafter this source is referred to as *Annual Report*. See also the *Richmond Whig*, June 2, 1847.

mouth and Roanoke was much like the above road.⁶

A special freight train was operated by the Richmond and Petersburg Railroad Company, instead of the combination passenger and freight, by 1840. The fare of \$1.50 for the 22 miles in the thirties was soon reduced to \$1.00, and children and servants were allowed to travel for half fare.⁷ These fares were increased in 1855 to \$1.35 for adults and 85 cents for children and servants. The last were not allowed in the first class cars except in attendance of the sick or infants. The average fare was then 4½ cents per passenger-mile and 9½ cents per ton-mile for freight.⁸

A typical schedule on this road for 1849 indicates that the mail trains left Richmond at 6:30 a.m. and Petersburg at 5:30 a.m. The accommodation and freight trains left Richmond (N.W.F.) at 5:30 a.m., Richmond (T.T.S.) at 8:30 a.m., and Petersburg (T.T.S.) for Norfolk at 3:30 p.m.⁹ The fares from Petersburg to the following Virginia stations were: Weldon, \$3.50; Salem, \$12.00; and Lexington, \$13.00; and to the following North Carolina stations, Greensboro, \$10.00; Salisbury, \$14.00; and Charlotte, \$17.00.¹⁰

As an example of intercompany cooperation, the Richmond and Petersburg Company advertised in the fifties the opportunity of riding over its line and the Virginia and Tennessee. In two days one might reach Sweet Springs, some 250 miles away in the western part of the State, for \$8.00 one-way.¹¹

From the beginning the fares and freight rates were higher in southern Tidewater than in northern Tidewater, Virginia. There were too many lines from the start, and they served a relatively poor agricultural section. Furthermore, the lines were poorly constructed and were in need of more funds for replacement. Poor management, so well illustrated in the fight between the two lines meeting at Weldon, also had an effect on the continuance of higher rates.

In northern Virginia the Richmond, Fredericks-

burg, and Potomac Railroad is the best illustration of the early lines. The first train left Richmond at 4 a.m. for Fredericksburg for \$4.00 one-way if the passenger was going to Washington. Contracts were made with the stage and steamboat companies to transport passengers for \$3.00 additional to the Capital City, making a total of \$7.00 for the trip from Richmond to Washington.¹² A freight, running triweekly, left Richmond at 5 a.m. and Fredericksburg at 8:30.¹³ In the early forties the total fare one-way from Richmond to Washington was increased to \$10.00 but was reduced to \$8.00 when its trains ran to the Potomac River in 9 hours time. The Negro passengers were taken for half fare, and this appears to have been the usual rate for the remainder of the period. Further reductions in fares in the later forties and fifties brought increased returns, and one could leave Fredericksburg at 8:30 a.m. and arrive in Washington 3 hours later at a cost of \$5.00.¹⁴ Fares to Baltimore from Fredericksburg likewise were decreased from \$7.50 to \$5.50 by 1850.¹⁵ By 1857 the road had carried more than a million passengers, without a single accident, over the 75-mile line, and the total fare, including 5 miles of water travel, was \$5.50 to Washington.¹⁶ This was at a speed of 18 miles per hour and an average fare per mile of 4 cents.¹⁷ The hours of departure from Richmond were 6:45 a.m. and 7:30 p.m. with special agents to check the baggage, and the passengers had the privilege of dining at Ashland.¹⁸

The year 1860 found the company carrying passengers at a speed of 20 miles per hour for 5 cents per mile, and through tickets had been arranged for which enabled one to travel from Richmond to Saint Louis for \$32.50, to Chicago for \$28.00, and to New York for \$11.50.¹⁹ These fares seem reasonable even today. This road, as well as the Baltimore and Ohio and the Winchester and Potomac companies, charged cheaper rates than the roads south of Richmond. The reasons lay in the fact that the lines were well

¹² *Richmond Enquirer*, Dec. 24, 1836.

¹³ *Ibid.*, May 22, 1838.

¹⁴ *Annual Report*, 26-27:472; *Richmond Enquirer*, May 22, 1843.

¹⁵ *Richmond Daily Compiler*, July 23, 1845; *Richmond Whig*, Jan. 1, 1847; *Richmond Enquirer*, Dec. 27, 1850.

¹⁶ *Richmond Enquirer*, May 13, 1857.

¹⁷ *Annual Report*, 40:306.

¹⁸ *Richmond Enquirer*, Dec. 30, 1858.

¹⁹ *Richmond Examiner*, Apr. 16, 1860; *Annual Report*, 43:262.

⁶ *Annual Report*, 20:105; *Norfolk and Portsmouth Herald*, Dec. 7, 1847; *Southern Argus* (Norfolk), Dec. 10, 1850.

⁷ *Richmond Compiler*, Dec. 24, 1840; *Richmond Whig*, Aug. 14, 1843.

⁸ *Richmond Enquirer*, Aug. 15, 1855, Dec. 30, 1858; *Annual Report*, 41:195.

⁹ *Richmond Whig*, June 27, 1849.

¹⁰ *Richmond Daily Times*, May 9, 1853.

¹¹ *Richmond Daily Dispatch*, Jan. 13, 1854.

built in the beginning, served good farm areas, and were strategically located for passenger travel. Special privileges were granted passengers on this road. Persons were permitted to flag the train by light or by handkerchief at a distance of 400 yards. Freight and passenger cars often made up the same train. Up to 1850 the Richmond, Fredericksburg, and Potomac did transporting for the Virginia Central Railroad by which passengers could leave Richmond for Lynchburg on Sundays, Wednesdays, and Fridays and reach their destination the second day. The fare from Richmond to Charlottesville was \$6.00, and the rest was arranged with the stages in the early forties.²⁰

The fare on the Winchester and Potomac Railroad was 6 cents per passenger-mile the first year, but it was reduced to 4½ cents in the last years before 1860. In spite of financial difficulties during the early forties due to the lack of returns, it maintained its reasonable rates. The Baltimore and Ohio with low rates and the Chesapeake and Ohio Canal competed with it for the same trade. The Winchester and Potomac should have been willing to incorporate with the Baltimore and Ohio system, but prior to the outbreak of war in 1861 the State would never allow this extension as long as this line fed into Baltimore. In spite of rates which were declared too low, the Winchester and Potomac managed to survive by suspending payment of dividends and paying its employees in script at times.²¹ On the other hand the Virginia extensions of the Baltimore and Ohio began with 6-cent fares, reducing them gradually to 3½ cents in the fifties, which showed vast reductions could be made with extensions and growing business.²² No wonder the Baltimore and Ohio attracted business!

The Virginia Central fares averaged 8 cents per passenger-mile in the 1830s and were gradually reduced to 4 cents by the middle fifties. One train, and later two, ran from Richmond daily, starting early and running the whole distance to the Jackson River, approximately 130 miles, by midafternoon. Transfer of cars was made without changing trains, and the most improved night

seats were provided. Negroes were charged the same rates that prevailed on other lines. The company specialized in excursions to the springs and frequently published the prices of tickets to Alum, White Sulphur, Sweet, and other springs in the western section of Virginia.²³ The speed at first was 15 miles per hour, and by the end of the period it had only increased to a little over 20 miles per hour because of the steep grades and the tunnels.²⁴

During 1845-1860 the railroads which spread to the west generally offered their services at lower rates than those of the earlier decade and also ran more and better trains. To illustrate this point the Richmond and Danville Railroad of southern Virginia and the Orange and Alexandria Railroad of northern Virginia will be considered in detail.

The first triweekly train on the Richmond and Danville line started from the coal pits at 8:30 a.m. and returned at 10:30 p.m. The first list of fares was as follows: Lower Quarries, 12 cents; Upper Quarries, 20; Brown's Turnout, 25; River Road, 37; and Coat Pits, 50.²⁵

After extensions to Amelia Court House and Jetersville changes were made. The Southside line was contacted at Haytokah, whereupon through fares from Richmond to Lynchburg became \$4.50 and to Clarksville, North Carolina, \$5.00.²⁶ Children under 10 years of age were allowed free passage, provided they did not take seats. Those between 10 and 15 years were charged 5 cents at first and later 4 cents in the early 1850s. Servants paid half fare and were required to furnish two passes, one to be left with the agent at the depot, stating their masters' permission for them to travel on the train. This was due to one of the local laws clamping down on their mobility.²⁷

The following fares from Richmond prevailed in 1856: Farmville, \$2.80; Lynchburg, \$5.00; Dan-

²⁰ *Richmond Daily Times*, Mar. 31, 1852; *Daily Republican* (Richmond), Nov. 17, 1852; *Penny Post* (Richmond), Mar. 24, 1855; *Richmond Daily Dispatch*, Feb. 17, 1858; *Richmond Examiner*, Apr. 16, 1860; *Annual Report*, 41:145.

²¹ *Annual Report*, 40:104.

²² *Richmond Whig*, Jan. 21, 1851.

²³ *Ibid.*, Oct. 20, 1851; *Richmond Daily Dispatch*, Jan. 20, 1852, Jan. 1, 1853, Dec. 27, 1854.

²⁴ *Richmond Daily Times*, Mar. 3, 1852, Jan. 1, 1853; *Richmond Whig*, Jan. 21, 1851.

²⁵ *Richmond Whig*, Jan. 4, 1842; *Richmond Daily Times*, Jan. 5, 1853.

²⁶ *Richmond Enquirer*, Aug. 23, 1833; *Annual Report*, 37:527, 41:281-287.

²⁷ *Annual Report*, 26-27:327, 41:316.

ville, \$5.60; Greensboro, \$7.00; Salem, \$9.00; Abingdon, \$12.60; and Russellville, \$20.20.²⁸

The schedule of 1858 follows: Leave Richmond, 5:30 a.m.; arrive at Junction, 8:15 a.m.; arrive at Danville, 1:18 p.m.; leave Danville, 9:15 a.m.; arrive at Junction, 12:00 m.; arrive at Richmond, 3:20 p.m. A further reduction in the fare to 3 cents per mile came in 1858.²⁹

The Danville, the Southside, the Virginia and Tennessee, the Tennessee and Georgia, and the Memphis and Charleston roads entered into an agreement to carry small Negro children free of charge over their lines. One petition contains twenty names of people who pointed out the great advantage of the Negro trade. This was a part of the drain of slave labor from the Upper South to the Deep South where "cotton was king." Virginia was becoming a breeding ground and market for slaves.³⁰ Free Negroes were even allowed to ride in the regular cars if they provided themselves with tickets and evidence of their freedom.³¹ Fares on the Southside and the Virginia and Tennessee lines ranged between 3 cents and 4 cents per passenger-mile.

Fares and schedules on the York River and the Norfolk and Petersburg lines were not different from those of the latter lines above. One train ran daily at the beginning, and by 1860 there were at least three. The fares varied from 2½ to 4 cents on the latter road. A number of stations were established between the terminal points, and the lines, being short, were covered in 4 hours by 1860.³²

The Orange and Alexandria Railroad, whose first train left Alexandria at 7 a.m. and arrived at Gordonsville at 11, charged fares of 3 to 4 cents. The average speed was 12 miles per hour.³³ Only as to times of arrival and departure did it vary during the remainder of the period. The total fare from Alexandria to Winchester was \$4.00.³⁴

²⁸ *Richmond Daily Dispatch*, Dec. 31, 1856.

²⁹ *Ibid.*, July 27, 1858.

³⁰ *Ibid.*, Jan. 2, 1860.

³¹ *Annual Report*, 41:424; 43:347; *Richmond Enquirer*, Apr. 4, 1860; *Richmond Daily Dispatch*, Jan. 29, 1853; *Richmond Examiner*, Feb. 16, 1856.

³² *Richmond Examiner*, Nov. 14, 1856; *Richmond Whig*, Oct. 20, 1859; *Daily Republican*, Jan. 21, 1852; *Richmond Daily Dispatch*, Dec. 20, 1858; *Daily Express* (Petersburg), May 17, 1858; *Southern Argus* (Norfolk), Nov. 2, 1860.

³³ *Richmond Enquirer*, Nov. 21, 1854.

³⁴ *Winchester Virginian*, May 23, 1860.

The Manassas Gap Railroad engaged the Orange and Alexandria to carry out its transportation with the same fares.³⁵ The Alexandria, Loudoun, and Hampshire was hardly started before the war; therefore, as far as service is concerned, its contribution was small. The whole trip from Falls Church to Berryville was planned to cost \$3.25.³⁶

During 1828-1845 the fares were several cents higher than on roads outside Virginia. Comparison with the Baltimore and Ohio and the Wilmington and Weldon fares shows that the Virginia railroads were 1 to 2 cents a mile higher. However, Virginia fares were lowered by 1845, and those charged by the roads established during the second period were on a par with those outside the State and certainly no higher.³⁷ No evidence has been found that bears out the claim that Virginia fares were the highest in the Nation.³⁸

Improved Facilities. The roads furnished increasingly improved facilities for the comfort of their passengers, such as improved cars, diners, sleeping cars, and inns along the way for their convenience. These inns were commented on as being numerous and serving good meals as compared with those along the Pennsylvania lines, where one stopped for 15 minutes "to pile in a lot of indigestible trash."³⁹ Several railroads were granting special rates to commuters, whose jobs were in the city, who would establish country homes. The Richmond, Fredericksburg, and Potomac allowed this privilege to the people of Ashland, while the Richmond and Petersburg did the same for the people living at Chester.⁴⁰

Grand Days and Special Occasions. Many special occasions demanded extra accommodations. The railroads had special days and grand occasions of their own which had to be duly celebrated. The Petersburg and Roanoke was opened with fitting ceremonies at Petersburg. One man described the trip there in glowing literary terms: "The locomotive flying on the railroad absolutely reminds one of the fables of the fairy slipper, Aladdin's lamp . . . the Arabian Nights are scarcely less wonderful than the realities of the spectacle

³⁵ *Annual Report*, 40:189, 43:211.

³⁶ *Winchester Virginian*, Nov. 28, 1860.

³⁷ Howard Douglas Dozier, *A History of the Atlantic Coast Line Railroad* (Boston and New York, 1920), 59.

³⁸ Meyer, *History of Transportation in the United States Before 1860*, 463.

³⁹ *Richmond Daily Dispatch*, Aug. 23, 1860.

⁴⁰ *Ibid.*, Aug. 11, 1860.

exhibited before our eyes. The application of steam to railroads marks one of the signal triumphs of science and one of the memorable epochs in the relations of human affairs. It is perhaps second to the discovery of the mariner's compass and the art of printing."⁴¹ The Richmond, Fredericksburg, and Potomac Railroad ran an excursion from Richmond to South Anna in 1836 to celebrate the opening of its first stretch. The train left H Street with colors flying and a band playing. At a sawmill plant a table was spread, and much enthusiasm was manifest.⁴² At the completion of the Blue Ridge Railroad, the Virginia Central sent a special train with Governor Henry A. Wise and other notables aboard to pass through the Blue Ridge tunnels for the first time. A banquet at the American Hotel in Staunton topped off the occasion.⁴³ Other roads such as the Clover Hill and Petersburg and Norfolk held big celebrations at their openings.⁴⁴ Extensions would often call for special festivities, as when the Virginia and Tennessee completed its extension to Bristol. Two excursion trains entered the city under an arch where 6,000 people welcomed their coming.⁴⁵

To attract customers or to favor individuals or groups, special trains and rates were offered. In 1843 the Richmond, Fredericksburg, and Potomac ran a special train from Richmond to Washington and back for \$6.50.⁴⁶ The special rate of \$4.00 was offered to fishing parties to go to Piney Point. Part of the trip was by boat, reaching the Point at 7 a.m. where meals were served on the grounds.⁴⁷ Again in 1849 the road favored Nicholas Mills, a member of the Board of Public Works and a president of several railroads at different times, with an outing for his friends at the Milford Hotel.⁴⁸

National events called for special services, and the railroads answered. For the presidential inauguration in 1857, the Virginia Central and the Orange and Alexandria lines agreed to take passengers from Richmond and back for \$6.00.⁴⁹ The Richmond, Fredericksburg, and Potomac of-

fered special accommodations for those who wished to attend the funeral of President Zachary Taylor, and more than 250 people used its services.⁵⁰ Using the same road, one might attend the National Fair at Washington in May 1846 for \$7.00 round trip.⁵¹ For attendance at local fairs and the like, the railroads were solicitous of trade. The Virginia and Tennessee offered the members of agricultural societies free return tickets from the State agricultural fair of 1859.⁵² The Richmond and Danville offered the same service to members and their exhibits. Three days' notice was required should the exhibit be livestock.⁵³

Schedules varied in summer and winter and often in favor of those who sought the mineral springs in summer. The appeal of those springs was very great for their medicinal as well as recreational value. For example, the Virginia Central trains left Richmond for the springs at 6:30 a.m. and returned at 11:30 p.m. during June 1853, part of the distance being covered by stage. The following fares were charged for trips one way: Rockbridge Alum Springs, \$7.50; White Sulphur, \$10.50; Bath Alum, \$8.50; and Warm Springs, \$8.50.⁵⁴ The Virginia and Tennessee and allied roads advertised that one could leave Richmond at 6 a.m. and arrive at Lynchburg at 12 m., and at Bonsack's depot one might take a coach to reach Serut Springs and White Sulphur Springs at the rate of \$10.00 and \$11.00 respectively including stage-coach fares.⁵⁵ The Richmond, Fredericksburg, and Potomac provided special accommodations for invalids' travel. The railroads afforded the most ready access to the health and the recreational facilities of the State.

Freight Carriage. A majority of the Virginia railroads specialized in transporting freight. The Chesterfield and the Clover Hill lines carried freight exclusively. Only two companies, the Richmond, Fredericksburg, and Potomac and the Virginia and Tennessee railroads, received more income from passengers than freight. As for freight, coal was the main item for a number of lines. Various types of cars were placed on the rails to accommodate the many types of freight, such as flat, stock, hay, box, and powder. A

⁴¹ *American Railway Journal*, Jan. 19, 1833.

⁴² *Virginia Advocate* (Charlottesville), Feb. 20, 1836.

⁴³ *Richmond Enquirer*, Aug. 26, 1856.

⁴⁴ *Richmond Whig*, Apr. 16, 1849; *The State* (Richmond), Aug. 31, 1858.

⁴⁵ *Richmond Enquirer*, Oct. 6, 1856.

⁴⁶ *Richmond Daily Compiler*, Sept. 6, 1843.

⁴⁷ *Richmond Enquirer*, Oct. 16, 1846, Aug. 20, 1847.

⁴⁸ *Richmond Whig*, Apr. 16, 1849.

⁴⁹ *Richmond Enquirer*, Mar. 3, 1857.

⁵⁰ *Richmond Whig*, July 17, 1850.

⁵¹ *Richmond Enquirer*, May 16, 1846.

⁵² *Richmond Whig*, Oct. 20, 1859.

⁵³ *Richmond Examiner*, Oct. 13, 1860.

⁵⁴ *Richmond Daily Times*, June 20, 1853.

⁵⁵ *Richmond Enquirer*, Aug. 15, 1855.

special car was provided for perishables such as milk, butter, fresh meats, and vegetables. From time to time regulations were issued to insure safe carriage. For instance, the Virginia Central required that castings and delicate structures be securely packed before being received at depots.⁵⁶ Furthermore, the same road required that perishables, as listed above, should be put up securely and properly marked,⁵⁷ while the Richmond and Danville line required that the goods be delivered by 4 p.m. previous to the day of departure, and like most roads it stored goods only a certain number of hours free of charge.⁵⁸

Several typical railroads are taken up below, and differences are noted in the service of other lines. The Richmond and Petersburg, relying heavily on coal as its main cargo, at first carried 12,045 hogsheads of tobacco, 2,080 bales of cotton, 87,214 barrels of flour, and 853,775 bushels of coal in 1846. The charge per ton had been 10 cents a mile, but this sum was gradually reduced, especially during the last decade before the war. To its list of freight articles were soon added dry goods, groceries, and iron.⁵⁹ These continued to be the main products handled in increasing amounts with different rates on each. By 1860 the rates per ton for each mile were 7 cents for tobacco, 9 cents for wheat, and 2½ cents for coal.⁶⁰ Most roads were required to make a minimum charge for light articles of at least 25 cents.

In northern Virginia the freight was substantial, at least on the east and west lines. In 1835 the Winchester and Potomac Railroad transported the following: Flour, 15,720 barrels; grain, 11,457 bushels; meal, 2,379 bushels; iron, 98 tons; lead, 61 tons; merchandise, 258 tons; plaster, 262 tons; fish, 2,923 barrels; and salt, 2,675 bushels.⁶¹ The rate was 6 cents per ton as provided in its charter.⁶² Depressions and crop failures early registered declines in tonnage. Still, freight remained the big item, as the following table indicates.⁶³

	1839	1840	1841
Mail (tons).....	1,370	2,125	1,629
Passengers.....	16,175	15,491	16,163
Freight (tons).....	46,502	50,870	43,701

⁵⁶ *Ibid.*, Mar. 8, 1852.

⁵⁷ *Richmond Daily Times*, June 29, 1859.

⁵⁸ *Richmond Daily Dispatch*, Jan. 12, 1855.

⁵⁹ *Annual Report*, 30-31:122, 444, 38:445.

⁶⁰ *Ibid.*, 43:99.

⁶¹ *Niles' Weekly Register*, 44:429.

⁶² Virginia General Assembly, *Acts*, 1832, 73.

⁶³ *Annual Report*, 26-27:176.

To increase the flour trade the Winchester and Potomac shipped plaster over its road without charge in the forties.⁶⁴ As a result, plaster cost \$4.00 a ton as compared with \$12 to \$15 a ton before. The railroads were doing their part for conservation and scientific farming. As the following figures for 1848 show, the shipment of plaster was not inconsiderable. The westbound trains carried 8,360 tons of merchandise, 4,076 of plaster, and 1,176 of coal; the eastbound, 20,004 of flour; 2,011 of iron; and 158 of manganese.⁶⁵ By the fifties the rate on freight had fallen to 5 cents a ton-mile. In 1860 it hauled 21,585 tons of products distributed as follows: Forest, 101; mine, 4,201; animal, 416; manufactured goods, 8,503; and merchandise, 9,364.⁶⁶ The Winchester and Potomac was still a freight line in the main.

The Richmond, Fredericksburg, and Potomac Railroad derived its returns mainly from the passenger trade. Its rates were quite similar to those of the Winchester and Potomac, and the rates on lime were reduced to foster soil improvement.⁶⁷ The Richmond, Fredericksburg, and Potomac had a fair share of the produce trade; yet the passenger trade remained most important.

There was a large number of the items carried by the Virginia Central west in the fifties or returned to the Tidewater. As early as 1853 it reported 32,398 tons of wheat, flour, coal, plaster, and livestock. The rates on these items varied from 6 cents to as low as 2 cents per ton in 1857. Their charges per ton-mile on the following items were: Plaster, 4 cents; coal, 3; lime, 2; cattle, 4; guano, 3; wheat, 5; and pig iron, 4.⁶⁸ Besides these heavy articles, lighter ones such as fresh vegetables, oysters, dressed fowl, butter, lard, and furniture, were carried in special cars. If these products traveled less than 100 miles, the following rates prevailed: 5 pounds, 25 cents; 25 pounds, 30 cents; 50 pounds, 40 cents; and 100 pounds, 75 cents.⁶⁹ During the fever epidemic of 1855 in Norfolk and Portsmouth, the Virginia Central agreed to haul provisions free of charge for the populace. This showed the social concern of one railroad.⁷⁰ The total tonnage for 1860 was 64,588, including such articles as clover seed,

⁶⁴ *Ibid.*, 332-333.

⁶⁵ *Ibid.*, 34:323.

⁶⁶ *Ibid.*, 43:370-372.

⁶⁷ *Ibid.*, 23:118, 36:190, 43:264.

⁶⁸ *Ibid.*, 38:560, 40:105.

⁶⁹ *Penny Post*, May 5, 1854.

⁷⁰ *Richmond Daily Dispatch*, Sept. 14, 1855.

whiskey, apples, dried fruit, leather, rags, potatoes, dressed fowl, bacon, eggs, butter, and sundries.⁷¹ The company was willing to take fertilizer at cost to encourage its use so that guano and plaster bought in Richmond and carried to Charlottesville cost \$3.00 and \$2.75 a ton, respectively.⁷²

Some of the railroads of the second period, 1845-1860, began with freight rates of 8 cents a ton but soon reduced them to half that amount, as was the case of the Danville Road. The Clover Hill Railroad's charter declared that the company had the right to own and mine 500 acres of coal and iron in Chesterfield County.⁷³ This carrier's freight consisted largely of coal.⁷⁴ In order to add to their business the railroads encouraged and often urged the opening of mines in regions through which they passed. The Virginia and Tennessee, the Virginia Central, and the Baltimore and Ohio all urged the opening of the Springfield mines and those in western Virginia.

Of freight service on the Orange and Alexandria Railroad, one writer declared that it would secure for transportation 1,000,000 bushels of wheat, 2,000,000 bushels of corn, and 4,000 hogsheads of tobacco before it reached Lynchburg. This railroad was to major in the carrying of produce.⁷⁵ The rates varied from 4 to 5 cents a ton-mile. It is to be remembered that it transported freight for the Manassas Gap Railroad Company also. By 1860 the following rates per ton-mile were in force: Wheat, corn, and rye, 5 cents; flour and guano, 4 cents; plaster and manure, 2 cents; and coal and pig iron, 3 cents.⁷⁶ Other products such as anvils, bacon, brooms, chairs, carriages, cotton, crates, dry goods, furniture, hats, lead, lime, oil, plows, potatoes, shoes, spirits, salt, fish, sumac, apples, shingles, and blooms were also hauled. This list shows what the people formerly landlocked desired for their homes and what they had to sell or exchange.⁷⁷ The company's rates were lowest in the State, and the reason for this was its strong financial standing. Since it served a rich section, its business was constantly on the increase.

As haulers of freight the railroads were doing an excellent job and at lower cost than any other mode

of transportation had offered before. The second period saw further extension, improved rolling stock bringing more and more products to town and to the country more often and at less cost per mile. It cannot be too strongly emphasized that the railroads were, in the main, freight lines. With consolidation of lines, freight was more easily transferred, and exchange agreements were made. The Danville Company incorporated the Chesterfield line, while the other lines effected transportation for sister lines. The Winchester and Potomac was linked to the Baltimore and Ohio at Harper's Ferry by a 900-foot viaduct.⁷⁸ The Virginia and Tennessee, the Danville, and the Southside lines joined at junctions, while in northern Virginia, the Virginia Central, the Richmond, Fredericksburg, and Potomac, the Orange and Alexandria, the Manassas Gap, the Loudoun and Hampshire, and the Baltimore and Ohio were united.⁷⁹ All of these unions made for longer hauls and cheaper rates which were more uniform in the end. By the fifties the freight rates hardly varied more than 1 cent above or below 4 cents a ton-mile. Connections were made with out-of-state lines, too, which made the above facts more significant. This consolidation appeared insufficient, for Southern conventions were urging more trade connections to increase the supply of products available and more economic independence from the North. One such convention was held by the Virginia and Tennessee itself in 1857, where a three-member commission was appointed to proceed to England to show the London, Manchester, and Liverpool chambers of commerce the advantages of direct trade with Virginia through the Great Eastern Steamship line.⁸⁰ This showed that the railroads, as well as the populace, were anxious to make the iron rails haul more to and from their doors—even products of Europe and Asia.

Other Railroad Benefits. The roads brought in dividends increasingly to the stockholders, as much as 12 percent in one case. Furthermore, new jobs were available for people through the railroads, and finally new industries sprang up as a result of them. The companies closely connected

⁷¹ *Annual Report*, 43:134-136.

⁷² *Richmond Daily Dispatch*, Apr. 11, 1855.

⁷³ Virginia General Assembly, *Acts*, 1841-42, 73.

⁷⁴ *Richmond Daily Dispatch*, Mar. 5, 1856.

⁷⁵ *American Railway Journal*, Sept. 12, 1857.

⁷⁶ *Annual Report*, 43:227.

⁷⁷ *Ibid.*, 39:904, 43:228.

⁷⁸ *Niles' Weekly Register*, 47:42.

⁷⁹ *Richmond Whig*, Sept. 3, 1850; *Annual Report*, 39:382; Virginia General Assembly, House of Delegates, *Journal*, 1855-56, 528; and Virginia General Assembly, Senate, *Journal*, 1852, 469.

⁸⁰ *Richmond Enquirer*, Apr. 27, 1857.

with railroad building were those manufacturing rails, cars, and engines for different roads. More and more could local equipment be bought. At least three cities of the Old Dominion, namely Alexandria, Richmond, and Portsmouth, had equipment for construction of engines. One report stated that the Southside Railroad Company had purchased two engines from a private manufacturer in Richmond, Uriah Wells by name, whose engines were equal in performance to those of the North.⁸¹ The same company bought engines from the Tredegar Iron Works, which were capable of pulling 29 cars loaded with 75 cattle and 2,000 bushels of wheat of net tonnage.⁸² Smith & Perkins Company of Alexandria furnished equip-

92 cents an acre, to \$39,400,000, or \$1.40 an acre, from 1834 to 1844 in the counties tapped by railroads.⁸⁴ By 1852 Pittsylvania County land had increased in value by 50 percent over the previous 10-year period, for which many people felt the Danville Railroad was largely responsible.⁸⁵ The York River Railroad was held partly responsible for the improved selling price of a farm located near Edmund Ruffin's plantation in Hanover County which was offered for sale at \$3,700 at one time, and in 1854 it sold for \$7,000.⁸⁶ Real estate values in cities rose. Richmond real estate had risen in value by 20 percent in 1853 over the previous 10 years.⁸⁷ In Portsmouth the advance in total value of real estate from 1831 to 1855 was

Population Growth in Selected Counties with and without Railroads, 1830-1860

Counties with Railroads by 1845	1830		1840		1850		1860	
	Whites	Slaves	Whites	Slaves	Whites	Slaves	Whites	Slaves
Chesterfield.....	7,709	10,337	7,859	8,702	8,406	8,616	9,730	8,354
Dinwiddie.....	8,655	10,356	9,847	8,702	10,942	10,880	13,678	12,744
Hanover.....	6,526	9,278	6,262	8,394	6,539	8,393	7,482	9,483

Counties with Railroads by 1860	1830		1840		1850		1860	
	Whites	Slaves	Whites	Slaves	Whites	Slaves	Whites	Slaves
Amherst.....	5,883	5,925	6,426	5,777	6,352	5,953	7,167	6,278
Augusta.....	15,257	4,265	15,072	4,113	18,983	5,053	21,547	5,616
Pittsylvania.....	14,694	10,999	14,283	15,558	15,263	12,798	17,105	10,194
Rockbridge.....	10,465	3,398	10,465	3,398	11,484	4,197	13,841	3,985

Counties with No Railroads	1830		1840		1850		1860	
	Whites	Slaves	Whites	Slaves	Whites	Slaves	Whites	Slaves
Bath.....	2,797	1,140	3,170	1,047	2,434	947	2,652	1,099
King and Queen.....	4,714	6,514	4,426	5,937	4,094	5,764	3,801	
Mathews.....	3,994	3,481	3,969	3,309	3,642	2,923	3,865	5,403
Powhatan.....	2,661	5,472	2,482	5,129	2,513	5,282	2,500	5,403

ment for the roads of northern Virginia during the fifties. Virginia was beginning to manufacture its own railroad supplies by 1860.

Railroads influenced Virginia land values. From the first attention was called to the land-values increases in the areas where railroads ran. The construction of the Petersburg and Roanoke Railroad was reported to have caused abandoned plantations along its line to be resettled, indicating that as early as the thirties the coming of the railroads was felt.⁸⁸ The increase in land value as a result of soil improvement and railroads was brought out in the General Assembly in its 1844-45 session, when it was declared that the assessed valuation had increased from \$16,000,000, or

from \$457,400 to \$1,058,209, which the editor of the *Richmond Enquirer* attributed again to the railroads.⁸⁹ As shown in a study of wholesale commodity prices of substantial duration, railroads alone were not responsible for these increases.⁹⁰ This factor as well as soil improvement would play their parts in raising the general land valuation.

The census reports reveal the effect of railroads

⁸⁴ Virginia General Assembly, House of Delegates, *Journal*, 1844-45, doc. 1, p. 2-3.

⁸⁵ *Richmond Daily Dispatch*, May 29, 1852.

⁸⁶ *Ibid.*, Jan. 13, 1854.

⁸⁷ *Ibid.*, May 23, 1853.

⁸⁸ *Richmond Enquirer*, May 29, 1855.

⁸⁹ Arthur Harrison Cole, *Wholesale Commodity Prices in the United States, 1700-1861* (Cambridge, Mass., 1938), 112.

⁸¹ *Annual Report*, 36:204.

⁸² *Richmond Daily Dispatch*, Jan. 13, 1855.

⁸³ *Richmond Enquirer*, Aug. 23, 1833.

on the population growth.⁹⁰ From the accompanying table one can gather that the railroads had a definite part in increasing the population of the State, for in every case in this sample, those counties with railroads as Chesterfield and Pittsylvania increased their population, while those little affected by railroads as Bath and Powhatan had no population increases and actually registered a decline. The first two counties were in the Tidewater and Southside areas of the State where tobacco growing had worn out much of the soil by 1830. Bath and Powhatan counties were in the Piedmont and western areas where the lack of transportation facilities made for high freight rates and the region less inviting to settlers. Except for the first period before the railroads had really spread very far, the following population figures for the whole State also reveal the influence of the railroads: 1830, 1,034,481; 1840, 1,015,260; 1850, 1,119,348; and 1860, 1,219,630.

The railroad rates compared well with those of other types of transportation. The following table shows a comparison between wagon and railroad transportation from Charlottesville to Richmond:⁹¹

	Railroad	Wagon
25 hogshead of tobacco (per hundred pounds)	\$1.25	\$3.75
500 bushels of wheat75	2.00
150 barrels of corn75	2.25
	<hr/> \$2.75	<hr/> \$8.00

One commentator asserted that the Danville Railroad passed through fine country, where the plantations paid \$67.50 per load to carry produce by train and \$224 by wagon.⁹² As for the canals, it was declared that farmers could save 65 cents per hundred pounds by using the railroads. The Kanawha Canal charged \$1.25 per hundred pounds for the trip from Lynchburg to Richmond as compared to 60 cents by rail.⁹³ Iron could be hauled \$1.00 cheaper by land than by water over the same mileage. The charge by water of \$1.32 per hogshead of tobacco was indeed considerable.⁹⁴ The comparative transportation costs per ton-

mile were: by canal, 2½ cents; by railroad, 1½ cents; and by wagon, 15 to 20 cents.⁹⁵

Largely as a result of improved transportation, Virginia's property valuation increased from \$299,878,329 in 1840 to \$590,531,881 in 1850, while the population increased from 1,015,260 to 1,119,348 in the same decade.⁹⁶ Even one of the men who opposed railroad development in the General Assembly had to admit that sections with railroads had improved at least 5 percent in value over sections not so fortunate.⁹⁷ The railroads improved land values, brought settlers in, and added to the total wealth of the State.

In mileage only Georgia outranked Virginia in the South by the time of the Civil War. Virginia lines were built and operated more cheaply than those in the neighboring States, and several roads could boast that even in panic years dividends could be paid, as in the case of the Virginia and Tennessee in 1857.⁹⁸ No wonder the companies could render such service and plan for still more by 1860.

Many Virginians were aware of the great military value of railroads and earnestly desired more outside connections for defense in case of trouble. This was especially noticeable in utterances between 1855 and 1860. One writer in 1859 declared that the General Assembly should see the need for completing through railroads for defense purposes, especially the York River and the Covington and Ohio lines.⁹⁹ Another pointed out the great value of the Virginia and Tennessee in transporting troops to Harper's Ferry.¹⁰⁰ Likewise, Governor Wise, in a speech before the General Assembly in 1859, urged the completion of lines already begun.¹⁰¹ These lines were to serve before long in transporting troops and supplies for the war when rates were generally cut in half for troop fares.¹⁰² The objective of several

⁹⁰ *Speech of Thomas Wallace of Petersburg on Bill Authorizing a Loan to the Southside Railroad Company*, 14.

⁹¹ *Richmond Whig*, Sept. 13, 1851.

⁹² *Speech of Charles Bruce to the General Assembly*, 1853.

⁹³ *Annual Report*, 41:38, 53.

⁹⁴ *Richmond Daily Dispatch*, Dec. 2, 1859.

⁹⁵ *Ibid.*, Feb. 18, 1860.

⁹⁶ *Virginia General Assembly, House of Delegates, Journal*, 1859-60, 35.

⁹⁷ John B. Mordecai, *A Brief History of the Richmond, Fredericksburg and Potomac Railroad* (Richmond, 1941), 32.

⁹⁸ The population data used in this paragraph and the accompanying table are from the U. S. Census Office, 9th Census, 1870, *Statistics of Population*, 69-70.

⁹⁹ *Richmond Whig*, Nov. 29, 1847.

¹⁰⁰ *Ibid.*

¹⁰¹ *Richmond Daily Dispatch*, May 29, 1852.

¹⁰² *Ibid.*, Mar. 1, 1855.

of the Northern armies was to stop rail transportation, and raiders in 1862 and later in Virginia tore up lines and sequestered the rolling stock for their own use.

General Conclusions. The following general conclusions can be drawn regarding the services rendered by the Virginia railroads before 1860. Fares and rates on freight were rather high on the original lines, but by the fifties they were lower and more or less uniform. Schedules were made fairly well. Better care was afforded both passengers and produce year by year. Special low rates were placed on fertilizer to encourage its use. Special fares were offered for grand days and special occasions to encourage trade to take advantage of recreational spots. Land values increased from 5 to 50 percent in areas traversed by iron rails. Railroads promoted the use of the

natural resources of the State, such as coal, iron, salt, and lead, in places as remote as Washington and Smith counties. Population increased in those areas affected by the railroads. The capital wealth of the State increased, through the decades under study, due in the main, to better means of transportation. The railroad offered the safest, cheapest, and most dependable mode of transportation in Virginia. Virginia built railroads at less cost and operated them more cheaply than the majority of the seaboard States. Only Georgia topped Virginia as to railroad mileage in the South. Virginia was beginning a new era with its slave market, small debt, tapped resources, and increased land values, and the most modern means of transportation, the railroad, was fast being woven into a network.

ADVANCING TRENDS IN SOUTHERN AGRICULTURE, 1840-1860

JAMES C. BONNER

Department of History, Georgia State College for Women, Milledgeville

This article is a description and interpretation in broad outline of some of the more progressive developments in Southern agriculture between 1840 and 1860.¹ The discussion is confined principally to movements and trends in the Cotton Belt of the Southeast. Attention is directed to the development of both the philosophy and the practice of a better agricultural life in the region and to the similarities between these developments and those of the period following World War I.

The era immediately following the Civil War produced few major achievements in Southern agricultural development. But if this age was one of darkness, that which immediately preceded it was one of progress and achievement. There is perhaps no exaggeration in the statement that more scientific agricultural practices prevailed in the Lower South in the two decades before 1860 than in the four or five decades which followed. A fact often overlooked is that an agricultural transition from an order based on cotton and slavery to

a more progressive one was well under way when the war and its dislocations intervened in 1861.

Agriculture in the Cotton Belt after 1800 followed stages of development which began with the Indian trader, followed by the cattle drover who, in turn, was replaced by the subsistence farmer.² In the 1820s staple crops came into prominence in the area. With the subsequent development of transportation and marketing facilities, certain areas passed rapidly into the plantation system. The social, economic, and political patterns produced by this system conditioned the thinking and the agricultural practices of many farmers who owned modest tracts and few slaves. The rapid exhaustion of the soil induced by unscientific growing of cotton and corn foretold a return to the subsistence farmer, the cattle drover, and the woodsman. In some localities of the Southeast this cycle had been completed by 1860, but in others there had appeared a regeneration of agriculture based upon improved cultural practices, diversification, improved livestock, and the more

¹ This article was presented at the meeting of the Agricultural History Society with the American Historical Association in New York City on Dec. 30, 1946.

² Ulrich Bonnell Phillips, *A History of Transportation in the Eastern Cotton Belt to 1860* (New York, 1908), 48.

refined embellishments of a society farther removed from the frontier. Today, one can travel through the old cotton kingdom, following the fall line from Raleigh to Vicksburg, and observe the unmistakable imprint of these trends in ante-bellum developments. Certain areas in the Carolinas and Georgia, for example, are almost abandoned except for a few squatters whose livelihood depends upon hunting and fishing, and perchance a part-time job of harvesting pulpwood. Abandoned hearthstones and chimney stacks betray evidence of once-prosperous agrarian communities. In other localities one can find the small farmer of both races living much like typical landowning folk anywhere in America. Elsewhere beef cattle and dairy herds may be found in thriving condition. In other localities still, are large cotton plantations under improved management, or commercial fruit, nut, and vegetable farms employing assembly-line methods of cultivation and harvesting.

By 1840 the Southeast was experiencing emigration of farmers from exhausted lands on a scale more serious in its effects perhaps than it had been in Virginia and Maryland. The Cotton Belt was an area always close to the frontier and the greater disparity between the cost of land and the cost of labor wrought a more tragic sacrifice of the soil. In Georgia alone, between 1802 and 1840, approximately 30,000,000 acres were distributed free to settlers by the State land lotteries.³ This bountiful supply of State land and that of the public domain farther west was often cited as the greatest impediment to agricultural stability in the region. Farmers desiring to leave worn-out lands of the Southeast were not disturbed by the hazards of transmontane migration and the uncertainties of unfamiliar soil types and weather patterns as were those who left Maryland and the Old Dominion at an earlier date. Sir Charles Lyell noted this relationship between migration and geography in the Lower South during the late ante-bellum period. The emigrants generally followed a broad belt on either side of the fall line and settled on land whose soil and flora were familiar to them.⁴ The escape gap from the exhausted farms of the Lower South was always open, and virgin fields were ever beckoning.

³ *Niles' Register*, 24:2 (1823), 28:160 (1825), 32:277 (1827).

⁴ Sir Charles Lyell, *A Second Visit to the United States of North America* (New York, 1849), 2:26-28.

Thus soil exhaustion and the ease of migration formed a vicious combination which threatened early calamity to ante-bellum life in the eastern Cotton Belt. As a result, many newspaper editors, professional men, planters, and politicians put forth vigorous efforts to achieve stabilization of economic conditions in the area.⁵ The crumbling of economic establishments about them placed their vested interests in jeopardy, but perhaps at equally important incentive to reform was the decline of their social and political life. "Oh, let us, for goodness sake, change our system of plantation economy," wrote one of these reformers on the eve of the Civil War. "Let us quit moving. Let the planters of the old cotton growing districts . . . feel themselves at home. Let them fill up the old gullies—improve the old red hills—prune the old orchard—improve the old homestead—enjoy the society of old friends—visit the old moss-covered church, in whose yard slumbers the remains of long departed friends. Then, and not until then, will the South begin to grow stronger and stronger, and her institutions placed upon an immovable basis."⁶ These sentiments were also reflected in song and story of the deep South in the period under discussion. Reminiscent of the Greek tragedy is Henry Rootes Jackson's *The Red Old Hills of Georgia*. Written in 1854, this simple ballad speaks undying devotion to a region falling into decay.⁷

This more or less universal concern for an improved economic life produced a remarkable list of agricultural reformers and some worthy achievements. An unrecorded spokesman for a new type of Southern agriculture was Charles Wallace Howard. Forced by tuberculosis to give up the pastorate of the Huguenot Church at Charleston, he moved to the Georgia foothills where he engaged in farming, teaching, and writing. A graduate of Princeton, he possessed unusual intellectual capacities and had enjoyed wide travel. During a tour of Europe he had been greatly im-

⁵ The origin and development of the agricultural reform movement in the Southeast is discussed in some detail in James C. Bonner, "Genesis of Agricultural Reform in the Cotton Belt," *Journal of Southern History*, 9:475-500 (1943).

⁶ G. D. Harmon, in *Southern Cultivator*, 16:210 (Augusta, Ga., 1858).

⁷ *Library of Southern Literature* . . . Edwin Anderson Alderman, Joel Chandler Harris, editors . . . , 6:2638-2639 (Atlanta, 1907).

pressed with the settled agriculture of that continent. From his wide experience he developed the doctrine that a stable agriculture could be achieved by increasing land values in proportion to the value of labor. Thus he would reverse the traditional frontier pattern of cheap land and a scarcity of labor.⁸ "Our system of agriculture is such that it allows to landed property no value independent of the labor bestowed upon it," he observed. "The negro is the investment rather than the *land*." Although not an outspoken exponent of abolition, he believed that the cost of slave labor in the South was in a false relation to land values. The value of slaves, he pointed out, was instantly affected by the price of cotton, while the value of the land which produced the cotton remained comparatively unaffected. "It is an extraordinary anomaly," he said, "that perishable labor should take precedence of imperishable land."⁹ He emphasized the fact that the low price of land in the South was due, not to slavery, climate, low cotton prices, or even to the abundance of western land, but rather to the defective system of Southern agriculture. He often cited the experience of a Belgian farmer who sold his establishment in Europe for \$500 an acre and bought land in the South at \$20 only to discover that the Belgian system of farming was much more profitable than that practiced on Southern plantations.¹⁰

Hence Howard's solution to the problems of Southern agriculture involved the improvement of land to increase its value. But equally important was the necessity for decreasing the demand for slaves and limiting the cost of labor. The latter might be achieved by rendering slave labor more efficient. In pursuing these ends he began a crusade for the development of a subsidiary agricultural enterprise based upon grasses, grains, and improved livestock. To attract to his cause those cotton growers who faced declining fertility of their soil, he revived the old Danish maxim, "Without cattle no manure; without manure no crops." He delighted in contrasting the pleasures and

comforts of a grass farm with the economic and spiritual liabilities of a cotton plantation. "The latter extracts our whole time," he said, "the former gives leisure for reading, study, and the amenities of social life . . . Sound political economy requires that the South should raise its own horses, mules, sheep, cattle and hogs, and produce its own wool, butter, cheese and hay. When we add these products to our cotton and rice and sugar, we shall, perhaps, live more independently than any other people in Christendom."¹¹ He cautioned farmers against their tendency to relegate only their worn-out lands to grass and to provide no after-culture. He urged that grasses be given the same attention as cotton.¹²

Many planters joined Howard in the quest for a suitable winter grass, for which a great need existed. Importations were made from abroad; grasses from Kentucky, Pennsylvania, and Ohio were tested.¹³ The effectiveness of Bermuda grass in holding the soil during winter rains came to be appreciated, but its tenacity rendered it useless in any system of rotation. Many planters went to work on this problem and partly succeeded in solving it.¹⁴ In the 1850s lucerne, or alfalfa, was brought to the West Coast from Chilean ports whence it was reintroduced into the South as Chilean clover. After testing it, Howard recommended it highly. He early discovered its nitrogen-fixing qualities and appreciated its value in restoring fertility to the soil.¹⁵

In January 1859, Howard established the *South Countryman*, an agricultural journal whose columns were devoted largely to the type of agriculture which he had long advocated. When his journal was absorbed by the *Southern Cultivator*, Howard became the associate editor of the latter and in this way acquired a wider hearing. But the advent of the Civil War dissipated much of the enterprise in grass culture which had been begun. In 1881, for example, Howard lamented that there were probably not 10 acres of lucerne on any one farm in the whole South.¹⁶

While Howard was developing through agri-

⁸ Charles Wallace Howard, *A Manual of the Cultivation of the Grasses and Forage Plants at the South* (ed. 3, rev., Atlanta, 1881), 1-6, and *passim*; Lucy Josephine Cunyus, *The History of Bartow County . . .* (Cartersville, 1933), 138, 140, 288; *Southern Cultivator*, 16:75 (1858), 17:162, 292 (1859), 18:122, 229, 341 (1860); *South Countryman*, 1:2, 55-58 (Marietta, Ga., 1859); *Southern Field and Fireside*, 1:247 (Augusta, Ga., 1859).

⁹ *South Countryman*, 1:106 (1859).

¹⁰ Howard, *A Manual . . . of the Grasses*, 5.

¹¹ *Ibid.*, 35.

¹² *South Countryman*, 1:2 (1859).

¹³ *Soil of the South*, 1:181 (Columbus, Ga., 1851); *Southern Cultivator*, 9:76 (1851).

¹⁴ *Southern Cultivator*, 3:76-77 (1845), 6:91, 180 (1848).

¹⁵ Howard, *A Manual . . . of the Grasses*, 10; and U. S. Department of Agriculture, *Yearbook*, 1937, 1042.

¹⁶ Howard, *A Manual . . . of the Grasses*, 11.

cultural journals and an occasional pamphlet a Southern philosophy on grasses, others were engaged in more hopeful experiments with improved breeds of livestock. Richard Peters, grandson of the famous Pennsylvania agricultural reformer, was the originator perhaps of the most extensive livestock experiment carried on in the Lower South by a single individual. Public spirited, and endowed with much practical wisdom, his great ambition was to free the South from the one-crop system. He generously devoted his growing financial resources to the stimulation of Southern livestock enterprises. His plantation became a privately operated experiment station for the region. He boasted that he had experimented with almost every kind of animal, fowl, and insect that could be found on the face of the earth, but never to have planted a single acre of cotton.¹⁷

In 1847, Peters began stocking his farm with Durham and Ayrshire cattle, but finding them difficult to acclimatize he restocked with Devons. When these began to succumb to murrain, he quietly planned other importations. He finally rejected all European breeds and, at the suggestion of Dr. John Backman of Charleston, he turned his attention to the sacred bulls of India. The Brahman cattle from the Orient thrived in the Georgia climate, producing excellent beef and ample milk. The latter, however, lacked butter-making qualities, and the animals, having a distinct aversion to women, proved disappointing as milkers. By judicious crossing with English breeds he attempted to improve their milk and to soften their tempers. But thin milk and vicious tempers remained. Because Southerners would not keep a capricious cow, Peters finally gave up the Brahman after long and costly experiment. The fact that the range-cattle industry in the Southwest later utilized the Brahman successfully suggests that Peters' cattle experiment did not go for naught.

The idea of sheep husbandry had long attracted the attention of Southerners who sought a profitable use for thousands of acres of abandoned land and the unoccupied pine barrens and hilly land on the fringes of the Piedmont. The Merinos of Spain were found to make excellent crosses with native sheep, giving weight and quality to the fleece and immunity to the usual diseases of the imported breeds.¹⁸ Henry S. Randall of the New

York Agricultural Society, in 1849, produced facts to show the superiority of Georgia and South Carolina as wool-producing States and warned New York growers of the competitive advantages of their Southern rivals.¹⁹ The most serious problem which plagued Southern wool growers was the ravaging of flocks by predatory dogs. Repeated efforts to secure effective legislation to cope with the dog problem were unsuccessful.²⁰

While pondering a solution to the dog problem, Richard Peters decided to experiment with goats. He was gratified to discover that Angora goats imported from Asia Minor would fight off attacking dogs, and they seemed to thrive on the scanty grasslands of the South. He also found that the flesh of crosses with common goats was superior in quality. Fifth-generation crosses yielded a marketable quality of mohair. But Peters himself was not interested in growing mohair but rather in stimulating the industry by supplying growers with the highest type of breeding stock. His record book shows that he shipped stock to breeders in various parts of the Union, but principally to buyers in the Southwest, which is the principal mohair-producing region in the country today.²¹

The interest of the ante-bellum Southerner in a new type of agriculture extended far beyond the range of traditional livestock enterprises. William Gesner of Alabama and John Carmichael of Georgia became outstanding authorities on pisciculture. Following their example, many planters in the 1850s embellished their estates with fish ponds.²² Also beekeeping and poultry raising became popular in many localities. At the Southern Central Agricultural Fair in 1851, more than seventy varieties of poultry were exhibited. The committee on livestock doubted whether this

¹⁹ Henry S. Randall, *Sheep Husbandry in the South* (Philadelphia, 1848), 95. New York produced nearly 10 million pounds of wool in 1835, while Virginia, the Carolinas, Georgia, Alabama, Tennessee, and Kentucky combined produced a little more than 7 million pounds. *Ibid.*, 17.

²⁰ *Southern Cultivator*, 21:136 (1865).

²¹ For a more detailed discussion of Peters' work, see James C. Bonner, "The Angora Goat: A Footnote in Southern Agricultural History," *Agricultural History*, 21:42-46 (1947).

²² *American Cotton Planter and the Soil of the South*, 2:256-263 (Montgomery, Ala., 1858); *Southern Cultivator*, 17:127, 264 (1859).

¹⁷ Nellie Peters Black, *Richard Peters, His Ancestors and Descendants* (Atlanta, 1904), 35.

¹⁸ *Ibid.*, 41.

exhibition had ever been equalled anywhere in the United States.²³

Interest in improved livestock was paralleled by a growing enthusiasm for a commercial fruit industry in South Carolina, Georgia, and Alabama. The possibilities of peach growing were early recognized in this region, but no serious efforts were made to grow them commercially before 1840. At that time small home orchards of native seedlings were planted—mainly for hogs and an occasional run of brandy. A writer in 1845 complained that such inferior fruit was produced as to render the brandy "little better than blue ruin or cocklebur whiskey."²⁴

In 1843, a Georgia farmer, following directions found in a Northern journal, claimed to have produced the only grafted fruit trees ever seen in his locality.²⁵ Five years later, Robert Nelson, a Danish refugee, came to Georgia and established a small nursery at Macon. A skilled horticulturist, he held a master of arts degree from a European university. Despite his foreign accent he soon found himself in great demand throughout the South as a lecturer on horticultural subjects, in consequence of which his nursery enjoyed wide patronage.²⁶ "If horticultural experience of thirty-eight years . . . should be of service to my adopted country, I shall feel happy in giving to the public the result of study and labor," he said.²⁷

Nelson's greatest contribution to Southern horticulture was his insistence upon improving the early varieties of peaches for the Northern markets. Skilled in grafting and propagating fruit, he did as much as any other man perhaps in getting the famous Georgia industry established on a commercial basis before the Civil War. As a practical demonstration of his idea, he sent a small shipment of early Georgia peaches to New York in 1853 where they sold for 50 cents each. Growers of the unimproved seedlings had sold their product the previous season for as little as 25 cents a bushel.²⁸

The expansion of the peach industry in Georgia

²³ David W. Lewis, ed., *Transactions of the Southern Central Agricultural Society, from Its Organization in 1846 to 1851*. . . (Macon, 1852), 46-48.

²⁴ *Southern Cultivator*, 3:185 (1845).

²⁵ *Cultivator*, n. s., 1:69 (Albany, N. Y., 1844).

²⁶ *Soil of the South*, 4:58-59 (1854).

²⁷ *American Cotton Planter*, 2:216 (1854).

²⁸ *Ibid.*, 2:50 (1854); *Southern Cultivator*, 14:91 (1856).

in the years which immediately followed these experiments was phenomenal. By 1861, annual sales from a young orchard of 100 acres near Columbus had reached \$7,500.²⁹ Growers had solved many of the problems of packing, shipping, and marketing. Raphael Moses, in 1857, had prevented late frost from injuring his fruit by building fires in his orchard. Southern planters had capitalized on their long growing season by entering both the early and the late markets. On October 5, 1858, the *Augusta Constitutionalist* reported nine cars of late peaches passing through Augusta from Macon destined for New York steamers at Charleston.³⁰ The *New York Daily Tribune* that year noted the very large shipments of this fruit from Southern orchards.³¹ The range in price during the season was from \$3 to \$15 per bushel, indicating that the best prices were paid for the earlier shipments as well as for expert packing and standard sizes.³² Southern nurserymen found their stock in great demand. In 1859 the Atlanta firm of Hardin and Peters shipped 4,000 peach trees to California around Cape Horn, and some of the Georgia stock found a market in New Zealand.³³ At this time Louis E. Berckmans, the famous Belgian horticulturist, moved his nursery business from New Jersey to Augusta, Georgia, where it became one of the outstanding establishments in the South.³⁴

The Civil War brought calamity to many of these growing horticultural enterprises. Georgia peaches flooded the markets of Richmond and other cities of the Upper South after 1861, but the new industry could not be sustained without accessibility to the larger markets of the North. As a consequence, the end of the war found most of these orchards in need of renovation, and marketing and shipping facilities in a state of disorganization. The backlog of cotton demands and the

²⁹ Raphael Jacob Moses, *Autobiography* (manuscript in University of North Carolina Library), 64.

³⁰ Quoted in *American Cotton Planter and the Soil of the South*, 2:347 (1858).

³¹ *New York Daily Tribune*, Sept. 18, 1856.

³² *American Cotton Planter and the Soil of the South*, 2:347 (1858).

³³ *Southern Cultivator*, 17:18 (1859 supplement); Black, *Richard Peters*, 46.

³⁴ *Southern Cultivator*, 15:120 (1857); Louis E. Berckmans, *Pear Culture in the South* (Augusta, 1859), 11. For additional data on early peach growing in Georgia, see James C. Bonner, "Peach Industry in Ante-Bellum Georgia," *Georgia Historical Quarterly*, 31:241-248 (1947).

relatively high price of the staple after the cessation of hostilities caused many to cut down their orchards and to return to the traditional crop. The famous nursery of Hardin and Peters was completely destroyed during the occupation of Atlanta; trees as well as houses were used as fuel by Federal soldiers during the winter of 1864.

Simultaneous with the development of the peach industry, there appeared in the Appalachian foothills a crusade to place apple growing in the South on a commercial footing. Jarvis Van Buren, a native of the Mohawk Valley in New York, moved to the South in 1840 and immediately recognized the horticultural possibilities of his adopted region.³⁵ In the two decades which followed, there were few issues of Southern agricultural journals which did not reflect his enthusiasm for the development of apple growing in the Southern foothills. Recognizing the superior flavor and keeping qualities of native seedlings which he found growing in the old Cherokee orchards, he undertook to name and classify them. Concerning the absence of a horticultural nomenclature in the South at the time, he said: "We have only one peach, I believe, that has a name, the Indian Peach; and one apple, the Horse Apple. And depend upon it, a name is as useful to a fruit as it is to a man. It will not make its way in the world without a good one."³⁶ Van Buren made full-sized drawings of thirty apple specimens and colored them with remarkable fidelity.³⁷ With the aid of other Southern horticulturists, he organized a pomological society. By 1860 a workable nomenclature had been established.

For a time Van Buren appeared to be the only Southerner who believed that the region could produce a superior apple. In 1854 he exhibited the Southern product at a Pennsylvania fair where it received wide acclaim and led to the introduction of some of these varieties into Lancaster County.³⁸ Thus he convinced many skeptics. By 1861 he was able to cite successful competition of Southern apples in Northern markets, and he believed that only transportation limitations in the hill country prevented unheard-of expansion of the industry in

the Appalachian region.³⁹ This erstwhile New York foundryman had become a throughgoing Southern nationalist. On the eve of the conflict between his native and his adopted sections, his outlook for the South's future was optimistic, and he believed that the new agrarian order was converting the South into "the paradise of the States."⁴⁰

The contributions of Northern-born Southerners and Southerners of foreign birth to the agricultural movement in its diversified aspects is one of the more significant features of the movement. The appearance in South Carolina and Georgia of French and German vine dressers after 1840 is said to have contributed much to the development of a grape and wine industry in the area.⁴¹ From wild grapes growing in the Carolinas, Georgia, and Alabama were developed such famous ante-bellum varieties as Catawba, Lenior, Warren, Devereaux, and Isabella, all of which proved more or less successful. Many growers reported an average of 350 gallons of wine per acre in 1858. A single Devereaux vine was said to have produced 30 gallons of wine.⁴² A horticultural committee reported an average of 55 bunches of grapes on each Catawba vine in a North Georgia vineyard.⁴³ A few farmers attempted to convert abandoned cotton land to grapes, and some success was reported. Prosperous vineyards sprang up throughout the Southeast, ranging in size from one to several hundred acres.

During the early fifties, Charles Axt, a Rhinelander, entered into a contract with planters in South Carolina, Georgia, and Alabama to teach the skill necessary for establishing the new enterprise. Securing expert assistants, his success exceeded

³⁹ *Ibid.*, 18:27 (1860); *Southern Field and Fireside*, 2:215 (1860).

⁴⁰ *South Countryman*, 1:18 (1859).

⁴¹ In the early 1830s M. Herbemont, Abraham Geiger, Guignard, and Maverick began a wine industry in South Carolina based upon imported vines. Unsuccessful in this enterprise, South Carolinians turned to native varieties. Lewis Cecil Gray, *History of Agriculture in the Southern United States to 1860* (Washington, 1932), 2:825.

⁴² *American Cotton Planter and the Soil of the South*, 2:374-375 (1858), 3:19 (1859); *Southern Cultivator*, 14:63 (1856), 17:213 (1859), 18:125, 381 (1860); and Southern Vine-Growers' Convention, *Proceedings . . . Aiken, S. C., Aug. 21-22, 1860* (Augusta, Ga., 1860), 1, and *passim*.

⁴³ *Southern Cultivator*, 14:315 (1856).

³⁵ *Horticulturist*, 6:195 (Albany, N. Y., 1851); *Chronicle and Constitutionalist*, Mar. 11, 1885.

³⁶ *Southern Cultivator*, 7:28 (1849).

³⁷ *Ibid.*, 11:47-49 (1853), 17:220 (1859); Ruth Van Buren Tufts to James C. Bonner, Sept. 2, 1941.

³⁸ *Ibid.*, 12:60 (1854).

expectations.⁴⁴ By 1857 Axt's "Still Catawba" wines had become well known on local markets. Sealed in specially-made hock bottles bearing an attractive label, this wine of 1857 vintage sold in Cincinnati two years later at a higher price than the famous Ohio wines—a fact which brought some degree of consternation to Ohio growers.⁴⁵ Louis E. Berckmans warned his Northern friends of the growing competition of Southern grape products. Attracting the attention of the Northern press was a paper by Dennis Redmond, read before the American Pomological Society at New York in 1857, which announced the end of Southern dependence upon the North for fruits of all kinds.⁴⁶

Such achievements as these were reflected in the proceedings of the Southern Vine-Growers' Convention at Aiken, South Carolina, in 1860. Recognizing that the same variety of grapes would respond differently to varying soil and growing conditions, growers agreed to adopt a consistent system of labeling. First on the label was to appear the name of the State, followed by the name of the town, river, or locality in which the wine was produced, and lastly the private brand of the manufacturer. The convention took a stand against adulteration of any kind and made considerable progress toward clarifying the problem of nomenclature of Southern grapes. Plans were made to invite all vine growers in the United States to the next annual meeting.⁴⁷ Due to the intervention of the Civil War, however, this meeting was never held. The end of the sectional conflict found the promising Southern wine industry in a state of lethargy from which it did not begin to recover until the 1930s.

An interesting sidelight on the ante-bellum grape industry was the announcement in 1860 of a successful method of destroying rot in grapes caused by fungi. This discovery was made by Dimos Ponce, a Georgian of Spanish origin. His fragmentary report, published in the *Southern Cultivator*, suggests the strong possibility that he ante-

dated the discovery of Bordeaux mixture by the Frenchman, Alexis Millardet.⁴⁸

The hardiest native grape was the scuppernon. Never subject to rot and mildew or the attacks of insects, it was also a prolific bearer. It was generally agreed that the fruit as well as the wine was of unsurpassed flavor. Recognizing the commercial value of this wild grape, Southerners undertook to solve the basic problems of production and marketing. However, these problems were never completely solved. Even when growing on the same vine, the grapes mature a few at a time, extending over a period of six weeks or more. The fruit appears in small bunches of two to six grapes, each tending to drop off singly as it ripens, thus rendering harvesting a tedious and endless process. The necessary separation from the stem leaves the fruit covered with its own juice and subject to souring and therefore highly unattractive in markets. When vintage was attempted by ante-bellum growers, the final product proved difficult to standardize as to quality, flavor, and alcoholic content. This was due to the varying degree of ripeness of the fruit and the necessity of an abnormally long vintage period which extended into the fall.⁴⁹ Lacking wine cellars, Southerners were never able to control the temperature, which was essential to even vintage.

The quest for new enterprises led to the re-discovery of many important field crops, such as the field pea and the soybean. The former was not fully appreciated before 1860, either as a soil builder or as food for man and beast.⁵⁰ By 1860 it had become a household word on many Southern plantations and was widely used in a system of crop rotation. Agricultural journals referred to it as "the clover of the South."⁵¹ General Robert E. Lee is said to have credited the Confederate

⁴⁸ *Southern Cultivator*, 15:284-285, 301-303, 336-338 (1857), 18:285 (1860); *Southern Field and Fireside*, 2:319 (1860). Cf. George Fiske Johnson, "The Early History of Copper Fungicides," *Agricultural History*, 9:67-79 (1935).

⁴⁹ A. De Caradeuc, *Grape Culture and Wine Making in the South* . . . (Augusta, 1858), 7.

⁵⁰ *Genesee Farmer*, 8:274 (Rochester, N. Y., 1847), 16:169 (1855); *Southern Cultivator*, 11:40-41, 100, 111 (1853), 13:151 (1855); David Lewis Phares, *Farmer's Book of Grasses and Other Forage Plants, for the Southern United States* (Starkville, Miss., 1881), 19; and U. S. Department of Agriculture, *Yearbook*, 1937, 1155.

⁵¹ *De Bow's Review*, 10:7 (1853); *Southern Cultivator*, 11:40, 100, 111 (1853).

⁴⁴ *Ibid.*, 11:280 (1853), 14:216-217, 288-289, 315 (1856).

⁴⁵ *Ibid.*, 13:320 (1855), 15:281 (1857), 17:79, 116 (1859).

⁴⁶ Louis E. Berckmans, "Shall We Dispense With Fruit?" U. S. Commissioner of Patents, *Report*, 1858, *Agriculture*, 370-373; Dennis Redmond, "Pomological Resources of the South," *ibid.*, 377-385.

⁴⁷ Southern Vine-Growers' Convention, *Proceedings* . . . Aiken, S. C., Aug. 21-22, 1860 (Augusta, 1860).

soldier's remarkable powers of subsistence to his use of this pea as a food. In 1856 the "Chinese Prolific Pea" was brought to the Lower South from Arkansas. After the Civil War it came to be known as the "Southern Relief Pea." Seed catalogs named it *Soja hispida*, and it became the soybean of a later era.⁵²

One of the most significant discoveries of new field crops occurred in 1855, when sorghum cane was introduced into the South under the name of Chinese sugarcane. The manufacture of sugar and molasses had long been a plantation enterprise of the tidewater area, but the economical supply of a carbohydrate food had always been a problem in the Piedmont. In 1856 Richard Peters of Georgia and ex-Governor Hammond of South Carolina simultaneously engaged in what was perhaps the first successful manufacture of sorghum syrup in the United States.⁵³ The Peters experiment was performed with the assistance of an experienced chemist who conducted the process with all the care and precision of an important scientific venture. It was reported in the same style. This printed report,⁵⁴ based on the Peters experiment, gained circulation throughout the region.

Unlike most of the late ante-bellum developments this plantation industry was accelerated by the Civil War, due in part to the Federal blockade. Sherman's bummers reported large supplies of "Confederate syrup" at many plantations on their march to the sea, and his soldiers are said to have developed a liking for it.⁵⁵ The poverty which followed the conflict gave added importance to this food. To the present day sorghum remains an important item in the diet of farmers living in areas removed from tidewater, and only in sophisticated circles is its use associated with poverty.

Valuable additions to Southern diet resulted from the serious attention given to vegetable gardening and to commercial truck farming in the last two decades before the Civil War.⁵⁶ These in-

novations also brought an added source of income. Prominent in this phase of agricultural transition was Charles A. Peabody of Alabama. Born a Connecticut Yankee and a tailor by trade, he came to the South in 1834.⁵⁷ Later acquiring a small farm on which to indulge his great passion for growing flowers, fruits, and vegetables, he became a prolific experimenter and agricultural writer. He developed a strawberry peculiarly adapted to Southern conditions, known as the Peabody Hautbois. Solon Robinson, after observing his work, called him "the most successful strawberry culturist in the world."⁵⁸ He sent sample shipments to Philadelphia where they were said to have arrived with "flavor, beauty, and keeping qualities . . . uninjured," after traveling by wagon, rail, and steamer a distance of more than 1,100 miles.⁵⁹ Three years later the fruit was said to have found its way to "every market town of any importance in the United States."⁶⁰ The long-standing monopoly of the Northern growers received a challenge. Consistent with his newly-acquired philosophy on Southern nationalism, Peabody refused to ship his plants north of the Ohio River.⁶¹ For many decades the Peabody Hautbois was the recognized ancestor of all improved strawberries in the Lower South.

Prior to 1850 the principal winter vegetable sold in Southern stores was the Irish potato, the supply of which came almost entirely from New England. Likewise onions from Wethersfield, Connecticut, were said to comprise two-thirds of all onions consumed in the South. Early in the 1850s, however, Southern varieties of both these items had been

of Columbus, Georgia, conducted a health column in *Godey's Lady's Book*. He frequently challenged the meat-eating habits of Southerners, both black and white. "If Southerners cannot manage to take in a sufficient quantity of grease, in the form of fat bacon or pork," he wrote sarcastically, "they are sure to supply any deficiency by saturating . . . everything else, in . . . hog lard." John Stainback Wilson, *Woman's Home Book of Health* (Philadelphia, 1860), 127.

⁵⁷ Mary Shepperson Crabb, George Alfred Peabody (a manuscript in private possession); *American Cotton Planter and the Soil of the South*, 1:276-277 (1857).

⁵⁸ Herbert A. Kellar, ed., *Solon Robinson, Pioneer and Agriculturist* (Indianapolis, 1936), 2:468.

⁵⁹ *Horticulturist*, 7:337 (1857).

⁶⁰ *American Cotton Planter and the Soil of the South*, 1:276-277 (1857).

⁶¹ *Southern Cultivator*, 15:24-25 (1857).

⁵² Phares, *Farmer's Book of Grasses* . . . , 19; U. S. Department of Agriculture, *Yearbook*, 1937, 1155.

⁵³ *Southern Cultivator*, 14:366 (1856).

⁵⁴ Dennis Redmond, *Sorgho Sucre, or, Chinese Sugar Cane: Its History, Proper Methods of Culture and Manufacture* (Augusta, 1856).

⁵⁵ *The Sorghum Handbook* (Cincinnati, 1888), 1; George Ward Nichols, *The Story of the Great March* (New York, 1865), 58, 66.

⁵⁶ Agricultural reformers of the period gave studied consideration to Southern diet. John Stainback Wilson

developed. The long blue collard gave way to the firm-headed cabbage, due perhaps to the presence of many German gardeners in the area.⁶² The census tabulations of 1860 bear ample testimony to the increasing production of other garden crops. The 12-acre truck farm of George A. B. Walker, at the junction of the Georgia and South Carolina railroads, contained thirty varieties of commercial vegetables. Similar enterprises were found around nearly all major cities and important towns. Early vegetables from Georgia were reported on the markets of Saint Louis and Chicago.⁶³

With these developments came an interest in floriculture, landscape gardening, and improved standards of rural houses. Utilizing native evergreens and shrubbery, Southerners developed what was called a "Southern system" of landscaping, differing radically in principle and design from that of Andrew Jackson Downing of New York. It was at this time, for example, that the magnolia became a popular adornment of plantation residences. In architecture there was a decided movement toward harmonizing many conflicting elements between the Gothic and the Greek Revival and in evolving a Southern compromise between these two on the one hand and the old double log cabin with its many variations on the other. Emphasizing low cost, simplicity, and comfort, this incipient plantation architecture reflected climate, the agrarian culture of the region, and Southern nationalism. This architectural development never came to full fruition, however. After the Civil War this phase of Southern culture suggested that same frustration which characterized the South's social and economic life.⁶⁴

Thus there were many efforts to refine and embellish the life of the ante-bellum planter. These efforts, as well as those directed at achieving a non-cotton economy, were manifestations of a conscious effort on the part of many leaders, such as Charles W. Howard, to enhance the value of realty. But the movement also bore many implications to the correlated problems of labor. Diversification and the type of intensive farming which fruits, vegetables, and certain new field crops induced

obviously discouraged the use of unskilled and inefficient labor such as that generally performed by Negro slaves. Hence the problem of rendering labor cheaper and more efficient had to be attacked directly if the frontier ratio between the value of land and that of labor was to be reversed. To accomplish this end, the immigration of foreigners and Americans of Northern birth received encouragement.⁶⁵ While these landless whites did not always enter directly the pursuits of agriculture, the few who did so contributed much to the diversification movement. Others made notable contributions to the trades and crafts. Irish stone masons, for example, dominated that trade in many plantation communities. German nurserymen and gardeners and French vine dressers are much in evidence on the census tabulations of 1860. Northern artisans were doing much of the blacksmithing, making leather goods, and performing some of the carpentering on the plantations. Many members of this group eventually entered the agricultural class as small landowners after they had acquired sufficient means.⁶⁶

The most significant achievement in solving the problems of labor costs resulted from direct efforts to improve the efficiency of slave labor. It is interesting to note that the planters who accomplished most in this respect were those largely committed to cotton economy as opposed to diversification. One of the pioneers in improved slave management was David Dickson of Georgia. Employing no overseers, he undertook to train his Negroes to become expert operatives with farm tools and equipment, and he somehow instilled in them a craftsman's pride in their work. Providing the best of tools, he did not begrudge the time taken to sharpen and repair them. Negroes who could not meet the new standards of efficiency were sometimes sold to Southwestern planters or transferred to Western plantations where the highly productive land did not prohibit expensive labor. Like many of his enlightened neighbors in Hancock County, Dickson invested his surplus capital in land and commercial guano instead of slaves. Before the Civil War he had bought \$38,000 worth of Peruvian guano and had perfected

⁶² *Soil of the South*, 2:381 (1852), 3:663 (1853); *Southern Cultivator*, 12:258 (1854).

⁶³ *Southern Cultivator*, 12:258 (1854).

⁶⁴ For a detailed discussion of this topic, see James C. Bonner, "Plantation Architecture of the Lower South on the Eve of the Civil War," *Journal of Southern History*, 11:370-388 (1945).

⁶⁵ *Genesee Farmer*, 10:82-83 (1849); *Soil of the South*, 2:292 (1852).

⁶⁶ For a detailed analysis of the population elements in a typical plantation community, see James C. Bonner, "Profile of a Late Ante-Bellum Community," *American Historical Review*, 49:663-680 (1944).

the techniques of its application. "Double the productiveness of the land and it will be worth four times the present value," he advised. "Double the number of slaves and the price will depreciate one half."⁶⁷ Nor was Dickson adverse to employing white labor alongside his slaves. At one time he was accused of having used "50 to 100 white hirelings in almost constant employment" on his plantation.⁶⁸

James Thomas, a neighbor of Dickson, was meticulous and painstaking in his experiments with labor. He discovered that his Negroes would perform 15 percent more efficiently in very hot weather if given a 5-minute rest period after each 30 minutes of active labor. "They will quit work at night as fresh as they entered it in the morning," he declared, and "... demonstrate it by 'patting and dancing juber'"⁶⁹ Martin W. Philips of Mississippi recommended a rest period of 2 to 3 hours in the middle of the day when the sun was hottest; planters employing this system reported splendid results.⁷⁰ Night work and Sunday labor were discouraged. Females were assigned the lighter tasks, and frequent holidays were granted.

It is apparent that these planters recognized, as employers of free labor failed to do, that a law of diminishing returns necessitated liberal restrictions upon hours and conditions of work. Economic rewards from investment in human property were found to bear a direct proportion to the improvement of the life of thralldom. It was not uncommon to find white laborers employed on the more hazardous jobs, such as cleaning old fields or draining swamps, where the worker was subjected to snake bites or perhaps to malarial infection. The ante-bellum term, "po' white trash," coined by the Negro slave, may have had its origin here. The earlier disciplinary rules of the plantation became more flexible. The more progressive planters dealt with the slave as an individual and respected his personality. The function of the overseer was often assumed by the master or by his oldest unmarried son, thus increasing the opportunities for direct bargaining and personal

relationships between master and slave. The term "servant" came into wide usage instead of "slave." Greater consideration was given to his living accommodations, food, clothing, health, and amusement. Planter-physicians often wrote treatises on problems of health among plantation Negroes as they learned how to meliorate such diseases as typhoid, hookworm, malaria, and tuberculosis. Many plantation masters allowed time for growing a home garden and for producing a cash crop, usually giving the slave free time on Saturdays for this work. Where practicable, the Negro was placed on his own initiative.

The end of the "laying-by season," the Fourth of July, or Christmas was the occasion for annual barbecues. The outlay of food served by Colonel John Woolfolk of Columbus, Georgia, to his Negroes in 1853 at their annual barbecue was perhaps typical of these affairs. It consisted of 2 beeves, 2 shoats, 2 lambs, 2 kids, hams, chickens, chicken pies, pig-head stews, onion sauce, Irish potatoes, beets, squash, green corn, tomatoes, cucumbers, and other vegetables, with water-melons for dessert. "We are pleased to say," commented the local newspaper editor, that "it is the custom with most intelligent planters of this section" to give their Negroes an annual barbecue.⁷¹ These feasts were usually followed by music, dancing, and a baby show. Allowances of tobacco were frequently given to adults and a portion of whiskey on occasion. The Ohio-born father of Woodrow Wilson, in a pamphlet written on the subject in the 1850s, described the ideal relationship between master and slave as identical to that between parents and children.⁷² The last will and testament of plantation masters reflect a growing spirit of *noblesse oblige* in the waning years of the slavery regime. Manumissions frequently occurred on the death of the master. Loyalty and service were often rewarded by gifts of money or land.

The Southern labor system, in the 1850s, had much to commend it at the hands of Northerners transplanted to the South as well as others who made unprejudiced observations. Of the former, Richard Peters, Daniel Lee, Charles A. Peabody, Jarvis Van Buren, and numerous others adopted the system in its entirety. Lee was driven to outright secessionism by the anti-slavery propaganda

⁶⁷ George F. Hunnicutt, ed., *David Dickson's and James M. Smith's Farming* (Atlanta, 1910), 30-35.

⁶⁸ This statement was probably a gross exaggeration. It was made by one of Dickson's critics who was skeptical of his reputed success with slave labor.

⁶⁹ *Southern Cultivator*, 18:17-18 (1860).

⁷⁰ *Ibid.*, 7:69 (1849).

⁷¹ *Soil of the South*, 3:650 (1853).

⁷² Joseph R. Wilson, *Mutual Relations of Master and Slave as Taught in the Bible* (Augusta, 1861), 20.

of the abolitionists. Solon Robinson, the popular agricultural commentator of the age, thought that Southern slavery was one of the best institutions for the Negro that could be devised, and he reiterated his hatred for the abolitionists. This tendency to soften the edges of plantation slavery, however, was more or less characteristic of the regime in the older plantation belt. Like the plantation system itself, it was westward moving. It followed the receding frontier from Maryland and Virginia into Georgia and thence toward the Southwest.

Improvements in other phases of the cotton industry were even more significant perhaps than those pertaining to slave labor. The complicated problems of organization and marketing received the same intelligent consideration as the production aspects of cotton growing. After 1850, for example, improved cotton gins removed more lint from the seed and preserved the fibers unbroken, thus rendering the cotton more attractive to buyers and the seed more palatable to livestock.⁷³ Planters had come to recognize the value of the seed for fertilizer, vegetable oil, and other purposes.⁷⁴ Concerning this subject, the *Baltimore Daily Times* prophesied correctly that cotton seed and oil derived from it would one day become a source of great revenue for the Southerner. The *New Orleans Delta* suggested in 1853 that cottonseed oil products be substituted for butter and anticipated the discovery of oleomargarine.⁷⁵

In 1845 the chamber of commerce of Savannah, Georgia, urged planters of upland cotton to adopt bales of standard weight and size in order to facilitate shipping and marketing.⁷⁶ As a result, square bales of 400 pounds weight became generally adopted. To improve the quality of the staple, planters were cautioned to harvest the cotton as it ripened and to store it in close bulk for six weeks before ginning. This was said to allow oil from the seed to be imparted to the lint

giving it added weight and quality.⁷⁷ Jethro Jones of Georgia, taking his cue from livestock breeders in the area, developed an improved variety of upland cotton which received wide acclaim in America and Europe. It at once threatened the position of the sea-island growers. As stated by Jones, his desire was "to improve the great staple of our country, believing it to be as practicable as the *improvement of the wool upon a sheep's back*."⁷⁸

In order to prevent overproduction and to stabilize prices, Dimos Ponce, in 1844, advocated a scheme of crop control identical in philosophy and essential administrative technique to that of the New Deal of the 1930s, even in the details of State, county, and individual farmer allotments.⁷⁹ In 1862, the legislature of Georgia enacted a similar program into law, the ostensible purpose being to stimulate production of food crops for the Confederate armies.⁸⁰

With these developments occurred improvements in cultural methods and the development of appropriate plows for the new type of cultivation being advocated. Deep plowing of cotton and corn, for example, had given way to shallow plowing. Both the method of culture and the type of plows developed have undergone little change to the present day. Terracing and contour plowing underwent rapid development at this time, doing much to solve the problem of sheet erosion in the growing of clean culture crops. Daniel Lee, the Northern-born editor of the *Southern Cultivator*, stated that nowhere in the Union was this practice more skillfully followed than in Georgia and South Carolina.⁸¹ Garland D. Harmon, an enterprising overseer, was one of the foremost exponents of terracing and contour plowing in the Lower South. He experimented with growing cotton and corn without plowing, and he was a precursor of the thesis in Edward H. Faulkner's *Plowman's Folly* (1943).

With the return of better cotton prices in the

⁷³ David Ames Wells, in U. S. Commissioner of Patents, *Report, 1856, Agriculture*, 22; *Southern Cultivator*, 17:200 (1859); and *American Cotton Planter and the Soil of the South*, 2:97 (1858).

⁷⁴ John Ruggles Cotting, *An Essay on the Soils and Available Manures of the State of Georgia* (Milledgeville, 1843), 51.

⁷⁵ Quoted in *Southern Cultivator*, 12:68 (1854).

⁷⁶ The Savannah Chamber of Commerce to Tuttle H. Andas, July 3, 1845, in the Hancock Planters' Club Records.

⁷⁷ *Soil of the South*, 1:179-180 (1851).

⁷⁸ J. V. Jones, "Jethro Cotton," in Lewis, ed., *Transactions of the Southern Central Agricultural Society*, 406-408.

⁷⁹ Hancock Planters' Club Records. See also James C. Bonner, "Genesis of Agricultural Reform in the Cotton Belt," *Journal of Southern History*, 9:485 (1943).

⁸⁰ Georgia, *Laws, 1862*, 5-6 (Milledgeville, 1863).

⁸¹ *Southern Cultivator*, 8:49 (1850).

1850s the diversification movement received a serious blow. The cotton plant was wholly new to the systems of rotation developed in Europe and transplanted to the South with few modifications. Partly because cotton and corn were clean culture crops, the Southerner was hard put to find a place for his traditional staple in the new type of agriculture developing in the region. Also the heavy demands of the cotton crop during the growing season made it impracticable for the large cotton planter to engage in other and diversified enterprises.

Reflecting this situation was a schism which appeared within the ranks of the Southern Central Agricultural Society in the late 1850s between the large cotton planters on one hand and those who favored diversification on the other. Interestingly enough, the cotton-interest group included many of the leading politicians of the day, such as Robert Toombs, William L. Yancey, and Howell Cobb. The controversy led to a secessionist movement within the regional society in 1859, resulting in the rival organization known as the Cotton Planters' Convention. Holding its own fair and its own separate meeting in the same city with the parent organization, it was negotiating with some success for direct cotton trade with Europe at the outbreak of the Civil War.⁸²

⁸² *Ibid.*, 18:132 (1860), 19:154 (1861); *Soil of the South*, 1:177-178 (1851).

Thus the movement for agricultural reform bore a close relationship to those political forces which were changing the direction of Southern civilization in the last two decades before Appomattox. Southern nationalism was an important force back of the agricultural movement. Agricultural reform began with an almost fanatical devotion to Southern soil and a more or less censorious attitude toward slavery and the plantation system. It then moved toward diversification and economic nationalism. Finally, in the 1850s, when Southern nationalism was crystallizing into a movement for political independence, it returned somewhat reluctantly to an emphasis on cotton and to an aggressive attitude on slavery.

Previous writers have shown how the war brought physical wreck to the South's economy, dislocated markets for many of its diversified products, disorganized its labor system, and disrupted its social organization. One additional note to this epilogue needs to be added; namely, the war also crushed the spirit of Southern nationalism out of which the dynamic impetus of the agricultural movement had sprung. The current upward trend in Southern agriculture had to await the birth of leaders two or three generations removed from Appomattox. But the new agricultural renaissance of the Cotton Belt is sporadic, and it does not seem to possess the unifying spiritual forces of the old.

THE WYOMING STOCK GROWERS' ASSOCIATION

ITS YEARS OF TEMPORARY DECLINE, 1886-1890

W. TURRENTINE JACKSON

Department of History, University of Chicago

The Wyoming Territory, shortly after its creation in 1869, became a center of activity for the range cattle industry on the northern High Plains. To protect and expand their economic and political influence within the territory, the ranchers in that individualistic frontier country created an association known as the Laramie County Stock Growers' Association in 1873. The development of the range cattle industry in Wyoming can be measured by the expanding influence of this association.¹ During the first five years of its existence, a period which has been designated as the "formative years,"² the organization debated the scope and nature of its activities. At the annual meeting in March 1879, the association's name was changed to the Wyoming Stock Growers' Association, and as early as 1882, this ranchers' organization had reached its maturity. Through its large membership and the careful planning of its executive committee, this organized stock interest spoke officially for the Wyoming cattle business during the next four years. The laws of the range were prescribed by the association, and the political and social patterns of the territory were so completely dominated by ranchers that Wyoming became known as "The Cattlemen's Commonwealth."³

¹ Ernest Staples Osgood, *The Day of the Cattleman* (Minneapolis, 1929), 119-121.

² Louis Pelzer, *The Cattlemen's Frontier* (Glendale, Calif., 1936), 88.

³ W. Turrentine Jackson, "The Wyoming Stock Growers' Association; Political Power in Wyoming Territory, 1873-1890," *Mississippi Valley Historical Review*, 33:571-594 (March 1947), presents an analysis of the political and economic power of the association during the territorial period and summarizes its primary activities such as the supervision of the round-ups, inspection, and detective work. Such valuable services convinced Wyoming ranchers that association membership was a sound investment, and by 1886 its membership included 416 men who controlled 2,000,000 head of cattle valued at \$100,000,000.

A turning point in the prestige of the association was observed in 1886. The developments in the Wyoming ranching business during the last four years of the territorial period, 1887-1890, form a sharp contrast to the trends in the previous four. Numerous factors led to a period of temporary decline. Most widely recognized was the unfavorable climatic conditions on the open range in the winter of 1886-87. The previous summer had been dry and unusually hot, and extensive prairie fires were reported. As a result, there was a shortage of feed, and only an extremely mild winter could have prevented suffering of cattle on the open range. Unfortunately, as early as November 1 the snow began to fall, and by the end of January Wyoming was experiencing one of the most severe blizzards in its history. The Cheyenne papers reported that a 40-mile an hour wind accompanied by blinding snow was forcing ranchers indoors and cattle to wander aimlessly. The chinook for which the stockmen prayed never materialized, and when the losses, through death and mutilation, were counted in the spring, Wyoming citizens knew that the policy of using the open range for cattle without providing winter

Between 1882 and 1885 the association's annual budget increased from \$29,592 to \$57,600.

Membership figures were compiled from the secretary's report to the members at the annual meetings and from the Minute Book of the Wyoming Stock Growers' Association. Its records are deposited in the Archives Department, University of Wyoming Library, Laramie. The 1882 budget figure was obtained from the secretary's report printed in *By-Laws, Secretary's Report, Resolutions and List of Members of the Wyoming Stock Growers' Association and Laws of Wyoming to Protect Stock Growers, 1882*. Financial reports from 1884 through 1886 are in the Proceedings of the Annual Meetings, 1884-1899, a clipping book which includes newspaper accounts first published in the *Northwestern Live Stock Journal* at Cheyenne. On occasions, the secretary of the association added marginal notes in ink.

food and shelter was too great a gamble to be continued. Some ranchers lost 60 to 70 percent of their herds. Their widely publicized distress led to exaggerated estimates of the total destruction and created a panic throughout the range country. Many firms began to liquidate holdings. Careful studies have now estimated the loss from frozen cattle for the whole of Wyoming Territory at slightly more than 15 percent, but the animals which did survive were so emaciated that tax assessors reduced the evaluation of cattle holdings in the territory by 30 percent.⁴

The range had been overstocked by greedy men in an attempt to obtain wealth quickly from fattening stock on the grass of the northern plains. Thomas Moonlight, Wyoming governor who was bitterly antagonistic to the large ranching interests, reported in 1887 that "owing to the very large profits coming from the cattle industry upon the ranges, the business was overdone, and the supply of grass gave out before the last winter set in. . . ."⁵ Even in 1886, the price for cattle in the Chicago market was the lowest in history, partially due to overproduction and to the flooding of the market by southwestern cattlemen who were trying to cut the size of their herds. The valuable English market which might have cushioned the shock of the rapidly declining domestic price was lost in the middle eighties. Fearful of the spread of contagious disease, the British had issued a quarantine against cattle from the United States. In the lush years, 1880-1884, many cattle companies had built large herds by borrowing capital at high interest rates from eastern and foreign capitalists. Many of these concerns that had gambled on obtaining immediate profits to compensate investors were in desperate straits when the price of cattle dropped. Thus, overstocking, reckless finance, declining prices, and a shutdown on exports had combined to form a depression in the cattle business; adverse weather conditions precipitated a crisis that led to panic.⁶

The small ranchers, sheepmen, and grangers seized this opportunity to push the liquidation of the large cattle companies and to obtain a greater share of the public domain. Governor Moonlight noted whereas in the early eighties "Large syndicates were formed; immense corporations were organized; ranches were established; ranges were selected, and so the Territory became parceled out" that after the 1886 disaster the necessity for providing winter hay, water, and shelter would mean "smaller herds, more owners, better care, less losses, and more profits."⁷ A year later the governor's personal satisfaction was revealed when he wrote: "This was the turning point in the history of Wyoming. . . . Many of the largest cattle companies are now closing up the business and giving place to the smaller holdings. . . ."⁸

The coming of hard times was accompanied by an outbreak of smoldering dissension which had existed in the Wyoming Stock Growers' Association between the cattle "barons" and the small ranchers. From the earliest days of the cattle business when many a rancher had expanded his herd by branding the mavericks on the range, the owners of small but rapidly increasing herds were looked upon with suspicion. Many small ranch owners had protested for years against discrimination and insisted that the association was the agent for the large corporate concerns, many of which were backed by foreign capital. An outspoken association member wrote the secretary:

It seems to me that those who are the most wealthy have had all the *protection*, and the small fry the *persecution*. . . . Their mantle of wealth cover *mistakes* which would be called *crimes* had they occurred in a poorer man's corral. . . . If this is the principal [*sic*] on which the association is to be continued, why us small fish had better keep our money for *self* protection, rather than pass it into the hands of the monopolists to crush us with.⁹

⁷ Moonlight, "Report of the Governor of Wyoming," 1887, 1:1027-1028.

⁸ Moonlight, "Report of the Governor of Wyoming," Sept. 19, 1888, in U. S. Department of the Interior, *Report of the Secretary of the Interior*, 1888, 3:929.

⁹ Charles Pixley to Thomas B. Adams, Sept. 17, 1887. The incoming correspondence of the Wyoming Stock Growers' Association is filed in letter boxes alphabetically according to the name of the correspondent. There are from one to six letter boxes for each year. Records of outgoing communications

⁴ Alfred Larson, "The Winter of 1886-87 in Wyoming," *Annals of Wyoming*, 4:5-17 (January 1942); Osgood, *The Day of the Cattleman*, 220-222; Pelzer, *The Cattlemen's Frontier*, 113-114.

⁵ Thomas Moonlight, "Report of the Governor of Wyoming," Sept. 27, 1887, in U. S. Department of the Interior, *Report of the Secretary of the Interior*, 1887, 1:1028.

⁶ Osgood, *The Day of the Cattleman*, 218-219, 222-224.

The editors of several territorial newspapers had been antagonized by the political power of the association, and one of the most vicious critics of the stockgrowers' organization was J. C. Friend of Rawlins. In his *Carbon County Journal* he reported the details of every alleged discrimination against the small rancher and accused the association of "stealing and appropriating the poor man's stock" at the time of the annual roundups.¹⁰ Thomas B. Adams, the association's secretary, attempted to placate the accusers by investigations and correspondence.¹¹

Even the leaders in the stockgrowers' association began to quarrel among themselves in 1887. A real crisis arose when Ben N. Morrison, an inspector since 1879, reported that Tom Collins, a notorious cowhand whose movements the association had watched, was being protected by a member of the association's own executive committee. Morrison wrote from Ferris, Wyoming:

Tom Collins is in Rawlins he Sent out here today for his trunk to be sent in on Tomorrow's Stage I think he is going to leave the country. . . . As long as P. L. Smith is on the Executive Committee he will keep the Boys Posted there is Plenty of evidence here to Send him over the Road. . . . Collinses Partner is as bad a thief as Collins he has Kept behind the Scenes and now as Collins cannot work with any of the outfits here he makes a Sham Sale to Bartlett [Bartlet] his full name is Howard Bartlett if Collins gets clear and the Committe [sic] blackball Bartlett they will still hold the Fort.¹²

of the secretary were kept in letterpress books and arranged chronologically.

Pixley insisted he had been unjustly treated by the association as a result of the enmity of an executive committee member from Uinta County. The activities of A. C. Beckwith, who had tremendous investments in the southwestern part of the territory both in cattle and merchandise, were undoubtedly the cause of his grievance.

¹⁰ Adams to J. C. Friend, July 25, 1887.

¹¹ Adams wrote to E. A. Page, July 25, 1887: "The trouble is that most people instead of complaining direct to this office and getting satisfaction, go to some newspaper and vent their feelings against the Association. This proceeding is entirely unjust, and hardly merits my taking the trouble about it, except for the fact that we must try to keep the public contented and as favorable as possible towards us. For these reasons, I always go further out of my way to accomodate an outsider or a poor man, whenever I think a friend can be made for the Association."

¹² Ben N. Morrison to Adams, Apr. 25, 1887. The spelling and punctuation are Morrison's.

Adams invited Smith to Cheyenne to discuss the Collins situation, and during their conference Smith apparently attempted to defend himself by complaining bitterly against the association's failure to prosecute Arthur T. Corlett, a brother of the association's attorney who had been accused of illegal branding, and Alexander H. Reel, the association's treasurer since 1876, whose cowboys had taken horses and disposed of them without accounting to the owners.¹³ The upshot of this quarrel was Smith's resignation from the executive committee as a representative of Carbon County.¹⁴

Smith had a host of friends and followers around Rawlins,¹⁵ and R. B. Connor, his associate on the executive committee from Carbon County, became so embarrassed over the failure of the association to take action in the Reel and Corlett cases that he threatened to resign.¹⁶ Adams reviewed the Corlett case with Nathaniel K. Boswell, chief of the detective bureau, and both agreed that there was not sufficient evidence for a prosecution. He wrote to Connor that "the branding of which

¹³ Adams to J. R. Dixon, May 19, 1887.

¹⁴ P. L. Smith to the executive committee of the association, May 24, 1887; Adams to R. B. Connor, May 26, 1887. Adams wrote Morrison on Apr. 27, 1887: "I regret very much to learn your opinion of Mr. P. L. Smith as I always supposed that he was honest and straightforward." Later in the year Morrison reported that he had discovered several head of cattle branded with the lazy M of the association and also with Smith's brand. Yet he doubted that Smith had purchased any of the mavericks during the spring roundup. Adams replied on Sept. 14: "I am afraid the above named gentleman is not loyal to our Association, but of course we can do nothing on suspicion but must wait for our opportunity."

¹⁵ Smith was elected to the Wyoming territorial assembly in 1888.

¹⁶ Connor wrote to Adams on July 16, 1887: "I do not say that either one of them are guilty of anything wrong, but I claim that both cases should be thoroughly examined into by the association and if the evidence is against them it should lend its aid in the prosecution in the same manner it does in cases where the parties are not in such good standing in the association. I have been laughed at more than once around here because I could not succeed in having an investigation of the Heck Reel affair and that is one reason why I did not want to stay on the committee this year, and now as you say the committee insist upon keeping me on. I hope they will look into both of these cases and if there is anything in them treat them just the same as they would if it was some poor devil out on the Range."

Corlett was accused was done in the presence of a dozen men, and without the faintest show of deception on his part. These cases of misbranding occur on every round-up almost, and are simply the result of honest mistakes."¹⁷ The secretary reported that he had immediately gone to Reel for an explanation but was unable to get any satisfaction from him. After a formal complaint was registered by Connor, he wrote the association's treasurer that the incident of the stolen horses was periodically revived by the enemies of the association and undermining its prestige. "I beg that you will kindly give me a full statement of the matter as you understand it so that I can make the proper explanation," pleaded Adams.¹⁸ Adams assured Connor that "There is one thing that I want you and everyone connected with the Association to understand and that is that so far as it lies in my power, I will prosecute any one however high in position or good in standing who in my opinion has been guilty of crooked work."¹⁹ Although these squabbles reveal a growing tension among the officials of the association and were time consuming as well as a source of annoyance for the secretary, unity of purpose was never questioned.

The executive committee did consider it wise policy in view of the antagonism of outsiders to modify many association practices. One of the first actions was a curtailment in the use of the "black list." For years the secretary had inquired into the past history of newcomers to the territory who expected to enter the cattle business, and all suspicious actions were investigated by the detective bureau. On the basis of their reports the "black list" was prepared. A subcommittee of the association's executive committee had been charged with the responsibility of keeping this list of dishonest individuals up to date. Each association man was provided with a copy and forbidden to employ any cattleman or cowboy on the list under pain of forfeiting his membership

in the association.²⁰ At an executive committee meeting on April 5, 1887, the members decided that the territorial courts might consider their action as being in the nature of a conspiracy and suggested that the secretary request an opinion from attorneys. After considering their lawyer's report, the committee instructed the secretary to omit all clauses in association circulars referring to the "black list."²¹

The association had never secured the punishment of a cattle rustler without great difficulty, and in these years of adversity the executive committee found it utterly impossible to obtain a conviction from a jury. Burden of proof was placed upon the association, local officers and juries were sympathetic to the individual accused by the "cattle barons" in the association, and local lawyers found great profit in defending the outlaw.²² During February 1887, the case of *Wyoming Stock Growers' Association v. Cooper and Lineberger* was tried in the federal district court at Cheyenne before Judge Samuel T. Corn.²³ The two cowhands, accused of branding mavericks before the annual roundup, claimed that they had obtained the cattle in a legal manner, and the judge decided that the association had no right to take the stock since the association's brand, the only positive proof that the cattle were mavericks, did not appear on the animals. The judge, in an *obiter dictum*, scored the association for its intimidation and what he considered misuse of the roundup law. The territorial press misinterpreted his statements, and some papers released reports that the maverick law had been declared unconstitutional. The *Douglas Advertiser*, an anti-association paper, printed a headline, "Round-up Sale of Mavericks has been Declared Unconstitutional. You can't take a poor man's property without due process of law." Secretary Adams found it necessary to call upon

²⁰ Osgood, *The Day of the Cattleman*, 149-150.

²¹ Minute Book of the Executive Committee of the Wyoming Stock Growers' Association, July 14, 1885 to Apr. 5, 1911, Apr. 5 and 15, 1887. Hereafter, this source is cited as Executive Committee Minute Book. Thomas Sturgis to Corlett, Lacey, and Riner, attorneys, Apr. 7, 1887.

²² Osgood, *The Day of the Cattleman*, 154-155.

²³ A. J. (Jack) Cooper and Ed Lineberger were periodically on the association's black list. On Jan. 7, 1887, both were stricken from the list, but their names were added again on May 22.

¹⁷ Adams to Connor, July 18, 1887.

¹⁸ Adams suggested to Reel on July 27, 1887: "If the men are still employed by you, and you have any means of making them settle for stolen property, I hope you will see the wisdom of so doing. I understand that the knowledge of this matter works against us in every case that we have in the courts west of here, as everyone seems to be aware that the matter was never satisfactorily settled."

¹⁹ Adams to Connor, July 18, 1887.

Judge Corn personally in the presence of the attorney general of Wyoming to receive assurances that he had not passed on the constitutionality of the law.²⁴

During May 1887, the association brought Tom Collins to trial in Rawlins, and although attorneys presented rather conclusive evidence to prove that he had stolen and illegally branded cattle, the jury did not declare him guilty. It was this trial which made necessary the previously mentioned resignation of Smith, Collins' employer, from the association's executive committee, and the secret blacklisting of Cooper and Lineberger on the basis of testimony which they presented at the trial.²⁵

Again at the close of the year, the association went to the court in Cheyenne to secure the conviction of cattle thieves in the famous "Horse Shoe" trials.²⁶ Evidence presented in the court indicated that association detectives, in their zeal to obtain information, had urged the suspected parties to brand and thereby came very near rendering themselves liable for criminal practices. Adams recorded: "The result is that a great deal of money has been spent, and the result has been worse than useless. These are the things that make detective work so discouraging."²⁷ Newspaper reports created the impression throughout the territory that the association had instructed its detectives to counsel suspicious characters to violate the law. A grand jury investigation was instigated by Judge William L. Maginnis, who presided over the original trial, and the association was required to testify. Although Adams admitted that the detectives had made "improper suggestions" to the rustlers and had taken actual part in the illegal branding, they had never been instructed by the association to encourage anyone to commit a violation of the law. The grand jury finally agreed to issue no indictment. Although the public attitude toward the association was somewhat more favorable after the grand jury's review of the incident, many Wyoming citizens now felt they had evidence that the stockgrowers used "highhanded" methods in controlling the industry.²⁸

²⁴ Adams to G. W. Morgareidge, Feb. 23, 1887; Adams to I. R. Crow, Apr. 18, 1887.

²⁵ Executive Committee Minute Book, May 26, 1887.

²⁶ The incident occurred at Horse Shoe, a settlement no longer shown on the map.

²⁷ Adams to F. M. Canton, Dec. 6, 1887.

²⁸ Adams to J. F. Farley, Dec. 9, 1887.

The cattle rustlers in the territory were convinced that they could continue their illegal acts with little risk. An executive member from Lyons wrote the Cheyenne office:

Our court so far has not made a single conviction for lack of proper evidence. There is not a cowboy that will give another away on this range. . . . There is one thing certain, that if the Asso. is intending to stop cattle stealing in this section they [*sic*] will have to make a grand stand here at once or they may just as well close the doors as far as this section is concerned.²⁹

Detective work became more and more difficult for the association. Adams finally admitted: "there is no doubt that there has been a great deal of cattle stealing and illegal butchering throughout the Territory, and, in the opinion of those who are in a position to know, there is more of this kind of work going on today than there has ever been before."³⁰

Although the annual spring meeting of the association at Cheyenne in April 1887 was characterized by an atmosphere of gloom and the absence of the organization's highest officials, the treasurer was able to present an encouraging report. The association had operated on a \$57,000 budget in 1886-87, paid off all indebtedness, and had a balance of \$1,342 in the treasury.³¹ The combined disasters of 1887, however, placed the association in an embarrassing financial position before the end of 1888. The total operating budget had dropped to \$35,000, and a deficit of \$3,658 existed in spite of the attempt to curtail expenses. The Wyoming legislative assembly of 1888 voted to transfer the supervision of the spring roundup to a newly-created livestock commission, and the association, deprived of the funds from the sale of mavericks, operated on an extremely limited budget of \$6,295 for 1888-89. At the end of 1890, the association had only \$29 in the treasury.

The executive committee emphasized the retrenchment theme in its periodic sessions between 1887 and 1890. The territorial veterinarian was requested to consent to a reduction in salary in August 1887, and a month later W. H. Parker, an attorney in Deadwood, South Dakota, was notified that his services were no longer required

²⁹ R. H. Hall to Thomas Sturgis, July 14, 1887.

³⁰ Adams to W. R. O'Hair, Mar. 4, 1889.

³¹ Proceedings of the Annual Meetings, 1884-1890, 85.

by the stockgrowers since Dakota members of the association had failed to pay a special assessment to cover his salary as requested by the executive committee.³² When inspectors received a notice of a salary cut in September 1887, the reactions varied.³³ Association detectives likewise received a reduction in salary. Chief Detective Boswell and F. M. Canton in charge of the work in northern Wyoming were notified that they would receive only \$150 a month.³⁴ Canton complained that the \$2,500 a year which he had been promised upon assuming the responsibility for protecting the northern Wyoming range was the minimum essential to a good job. Furthermore, he had assumed his assignment was a permanent one. He agreed to continue to work at the reduced salary out of loyalty to the association but expressed the hope that his salary could soon be restored to the old figure.³⁵ Boswell submitted his resignation which was accepted by the executive committee on October 28, 1887. Adams, in notifying him of the committee action, confided: "Unless members pay what they owe, and *that promptly*, the work of the Association will come to a stand still. We *must, however, keep up*

appearances."³⁶ On December 10, 1887, "Matters connected with the Detective Bureau were fully discussed and the secretary was instructed to discharge all the employees connected with the Bureau."³⁷

The reduction of expenses through dismissals and salary reductions might have succeeded in balancing the treasurer's books had it not been for the continuous decline in membership and the failure of stockmen to pay dues. The membership figure was reported at 363 in 1887.³⁸ The following year the association membership dropped to 349, partially explained by 14 resignations and 21 suspensions for nonpayment of dues. At a called meeting in November 1888, it was agreed to drop from the rolls all men who were financially obligated to the group, and the secretary's annual report of 1889 announced the loss of 177 members. Fifty-two men had resigned and the names of 122 had been scratched in accordance with the November agreement. The association now claimed 183 members, a great reduction from the 416 announced three years earlier.³⁹

The Wyoming cattlemen had become engrossed in local affairs, and they no longer had the resources and energy to participate in stockmen's activities outside the territory. For example, although the association was a prime mover in the creation of the National Cattle Growers' Association, had furnished it numerous officers, and participated actively in its annual meetings between 1883 and 1886, the Wyoming group found difficulty in securing a representative delegation for the 1887 meeting.⁴⁰ When plans for the national meeting were inaugurated, Adams wrote: "We are willing

³² Executive Committee Minute Book, Aug. 4 and Sept. 6, 1887.

³³ James A. Hartman, inspector at Boone, Iowa, whose salary was reduced to \$100 a month, replied on Sept. 10, 1887: "I think you are Justifiable In cutting down expenses. Therefore knowing the surcumstances to a certain extent, I will submit to sallery offered by you. And try it. see If I can hold my own, which looks like very small wages. Is it Just for we who has been working for less sallery than others, to have thear sallery redused, or wouldn't It be more justfiable to take a small slice from thos who have been getting from \$25 to \$50 more on a month and make them all on a more equal basis." C. E. Talbot and Frank Brainard at Missouri Valley and Pacific Junction, Iowa, accepted their salary reduction with better spirit. Brainard wrote on Sept. 9, 1887: "Any one who has been an employee of the Association as long as I have and is as well acquainted with their extremely liberal method of dealing with their employees will be satisfied that such a reduction would not be made without good and sufficient reasons, and although I regret the circumstances which make the reduction necessary, I shall be willing to remain here."

³⁴ Executive Committee Minute Book, Aug. 4 and Sept. 6, 1887.

³⁵ Canton to Adams, Sept. 13, 1887.

³⁶ Adams to Boswell, Oct. 28, 1887.

³⁷ Executive Committee Minute Book, Dec. 10, 1887.

³⁸ Proceedings of the Annual Meetings, 1884-1899, 86-87. The secretary announced: "The effects of the long continued depression in our business are seen in increased lists of resignations, and of those who either from indifference or inability have failed to pay their annual dues."

³⁹ *Ibid.* Financial obligations were reduced in an attempt to hold members. In 1888 a change in the bylaws was proposed to eliminate an initiary fee of \$15 and to reduce the annual dues to \$10. No longer was a probationary period essential before election to membership since any man with \$10 who had the approval of the executive committee could join the association prior to action at the annual meeting. In 1889, the annual dues were reduced to \$5.

⁴⁰ Osgood, *The Day of the Cattleman*, 169, 179-180.

to send as good a delegation as we can get, to attend the convention, but cannot do so if it will involve any expense on our part, in the way of fees. Our association is absolutely without funds."⁴¹ He was finally obliged to report to the national officers:

I have been unable to secure a delegation worthy of the name, to represent the Wyoming Stock Growers' Association at the approaching convention of the Consolidated Cattle Growers Association. Over seventy names were selected by the Executive Committee and a circular sent to each one, requesting them to accept the position of delegate to the convention. Thus far only four have accepted, and I am afraid that the representation will be only nominal. I regret this state of affairs very much, but appreciate the fact that our stock men are thoroughly disheartened, and many of them are absolutely unable to incur the slight expense necessary to make the trip. I sincerely hope, however, that although the convention may be small, that effective work may be done and the result will redound to the credit of those who may be present and to the welfare of the stock interests at large.⁴²

The general depression in the Wyoming ranching business made a reorganization of the cattle association inevitable. When the full impact of the economic situation was first felt in 1887, the executive committee issued a circular to members, stating the condition of the association's affairs, calling attention to the material decrease in the maverick fund because of severe weather, and inquiring about the advisability of an assessment. Each member was requested to express his opinion as to the best course of action for the association.⁴³ The response was immediate and varied. John Clay, Jr., wealthy cattleman from Chicago, wrote: "I believe in keeping up the Association and am willing to pay whatever is necessary to assist you."⁴⁴ Thomas Sturgis, the association's former secretary, expressed the same willingness and suggested:

⁴¹ Adams to Alvin H. Sanders, Oct. 15, 1888.

⁴² Adams to Sanders, Oct. 27, 1887. The national meeting of the cattlemen was held at Chicago in 1883. Southern cattlemen attempted to create a rival national organization in 1884 at St. Louis, but a year later the two groups joined forces in a "consolidated" association. The organization, in time, was known as the National Cattle Growers' Association, but in 1887 it was sometimes referred to as the "consolidated" and at other occasions as the "national" organization.

⁴³ Executive Committee Minute Book, Sept. 6, 1887.

⁴⁴ Clay to Adams, Sept. 16, 1887.

To allow the Association to fail for lack of funds, would be to allow the stock interests to relapse into the dangerous condition from which the Association has raised them and from which it has protected them during the past fourteen years. . . . I think any business man will realize that the benefits arising, and the danger from which he is to a great extent preserved, are a thousand fold greater than the comparatively small sum which this assessment would cause him to pay.⁴⁵

Some ranchers were completely discouraged, however, and saw no hope in the reorganization of the association. One wrote the secretary a note of a single sentence: "I find that my cattle most all died last winter and I think I will withdraw from the association."⁴⁶ Another reported: "Times hard. Money short. loss 50 percent, no calves cattle credit played out."⁴⁷ Toward the end of September, Secretary Adams surveyed the responses to the circular and informed the executive committee that he had received a large number of replies and that the great majority favored an assessment. The committee then unanimously adopted a resolution levying an assessment of 2 cents per head on 70 percent of all cattle and horses owned and controlled by members of the association.⁴⁸ The secretary was obliged to report at the annual meeting of 1888 that the treasurer's accounts had failed to balance in spite of the program of retrenchment and the additional revenue from the 1887 assessment.

The members were also informed that the executive committee, realizing that much of the widespread unpopularity of the association was due to the broad powers it exercised under the maverick law, had inaugurated a movement for

* Sturgis to Adams, Sept. 22, 1887. Most of the "cattle barons" expressed an opinion on the subject. G. W. Simpson, wealthy stockman who was president of the Bay State Live Stock Company, proclaimed his surprise at the financial embarrassment of the association and wrote Adams on Sept. 28 that he endorsed the proposal for an assessment on all members. A Cheyenne rancher, Luke Voorhees, wrote the executive committee on Sept. 25: "I am in favor of keeping the organization. I do not favor keeping quite the number of detectives now employed but secure better ones at a lower salary. Cattle are worth almost nothing at all. There must be a judicious retrenchment in all expenses of the association or it will certainly fail."

⁴⁶ E. P. Breckinridge to Sturgis, Aug. 23, 1887.

⁴⁷ James A. Jackson to Sturgis, July 20, 1887.

⁴⁸ Executive Committee Minute Book, Sept. 26, 1887.

the repeal of the statute in the Wyoming legislative assembly of 1888. A new bill to transfer the control of all roundups to a territorial board of livestock commissioners had been drafted by the association.⁴⁹ Some ranchers felt the association had surrendered its most important function and questioned the necessity for its continuance. Anticipating this sentiment, the executive committee called upon the stockmen in attendance at the 1888 annual meeting to inaugurate a membership drive rather than allow members to drop out as a result of misapprehension or indifference. Secretary Adams assured them:

Organization of some kind will continue to be of vital importance to us as long as our interests are common. The very nature of the industry in which we are engaged, demands concerted action for mutual protection, and while we are willing to admit that the association must now retire from the field as the trustee and manager of the maverick fund . . . it must be granted on careful consideration that this association may properly, and should certainly continue, as heretofore, to exercise jealous care over the live stock interests of the territory, recommending to the board of commissioners from time to time such action as may be deemed necessary and advisable.⁵⁰

The nominating committee, in presenting the slate of officers for the following year, prepared an elaborate preliminary statement as follows:

The present is a very important time in the history of the cattle business in the west and northwest. We have been surrounded not only by dangers that come from climate, but there has been some disposition among the people in the east and perhaps a little in our own neighborhood to try 'to down us'—to use the expressive words of the camp—and it behooves us generally to stand together and for this association to endeavor to uphold the laws of the territory which the last legislature enacted.⁵¹

This committee dropped the name of Carey as president and recommended the promotion of A. T. Babbitt from the vice presidency. The new

leader, upon assuming his responsibilities, encouraged his colleagues by saying: "We are pulling through hard times but as a friend remarked to me today, it is always darkest just before the dawn—and I believe we have seen the worst vicissitudes of the cattle business, and matters have begun to improve."⁵²

The president's optimism was not justified for affairs went from bad to worse after 1888. The livestock commission had received no financial support from the territorial legislature on the assumption that the sale of mavericks would provide essential funds. At the close of the association's meeting of 1888, the commissioners met to establish the roundup districts and appoint foremen, but they did not have funds to make the essential expenditures for the conduct of the roundups. The association, already in debt, was in no position to help as an organization so a "special fund" was created by individual stockmen for the purpose of providing the commissioners with funds until the sale of mavericks provided income.

The receipts from these sales were barely enough to pay the commissions of roundup foremen, and the territory was without any "inspection fund." If inspection at railroad loading points and stockyards was to continue, a new fund had to be raised. The association again came to the aid of the commissioners and approached some of its members for a subscription in the form of a loan to the commissioners until an appropriation could be made by the legislature. Adams wrote several members: "It is very evident that the expenses incurred must either be paid by the Association under assessment, or by a special tax upon the live stock interests of the Territory, under sanction of the Legislature."⁵³ Most association members preferred another assessment rather than the granting of a "loan" to the commissioners by individuals, and during the delay caused by the discussion, R. L. Glover, secretary of the livestock board, wrote the association that inspectors could not be maintained after August 1. All county inspectors had already been discharged by the commissioners, and the association was requested to devise some means whereby this vital work

⁴⁹ *Ibid.*, 101.

⁵⁰ Adams to Hubert E. Teschemacher, June 28, 1888; Adams to John B. Thomas, June 28, 1888. These two men were asked to subscribe \$200 or \$300 as quotas for their cattle companies.

⁴⁹ Proceedings of the Annual Meetings, 1884-1899, 97. For a detailed discussion of the drafting and passage of the Wyoming livestock commission law, see W. Turrentine Jackson, "The Wyoming Stock Growers' Association; Political Power in Wyoming Territory, 1873-1890," *Mississippi Valley Historical Review*, 33: 590-591 (March 1947).

⁵⁰ Proceedings of the Annual Meetings, 1884-1899, 97-98.

⁵¹ *Ibid.*, 100.

could be continued at important markets.⁵⁴ The association took no immediate action, and official inspection work for the most part disappeared just as the detective work had been shut down the previous year. In this emergency at the height of the shipping season, one hundred and fifty Wyoming ranchers subscribed to a "special inspection fund," hired inspectors at Chicago, Omaha, and Saint Paul, and compiled a list of their brands to be used in identifying and claiming strays. All but fifteen of these men belonged to the association.

Eleven leaders of the association attended a special meeting in September 1888 and adopted a resolution calling another special session for November 11 in Cheyenne at which time members who had not paid dues and assessments would be expelled from the organization.⁵⁵ At the close of this session, Adams wrote to a friend:

We had a very small, but a very unanimous, meeting of the association yesterday, at which time it was decided to make a determined effort to reorganize the association on a basis of smaller membership. . . . It is decided to have a "cast iron" agreement between all members who propose to take an active part in the new organization so that everybody will be obliged to pay his dues or assessments or be dropped from the rolls. No inspection will be given to any one who is unwilling to bear his share of the expense.⁵⁶

During the third meeting of 1888 a committee was appointed to draw up a detailed plan for the reorganization of the association on the basis of the September agreement and to present that proposal at the next regular meeting in the spring. It was agreed, however, to delay in dropping names from the roll for nonpayment of dues. By resolution, the deadline was extended to April 1, and those dropped at that time were to be informed by the secretary that they could be restored to membership if they met their obligations by January 1, 1889. Association finances, in the meantime, demanded immediate attention. The executive committee was authorized to issue another assessment of 1½ cents per head on the cattle and horses of association members.⁵⁷

Just prior to the spring meeting Adams called

⁵⁴ R. L. Glover to Adams, July 25, 1888.

⁵⁵ Proceedings of the Annual Meetings, 1884-1899, 107.

⁵⁶ Adams to Frank Wolcott, Sept. 30, 1888.

⁵⁷ Proceedings of the Annual Meetings, 1884-1899, 109.

upon the executive committee members to assemble in Cheyenne to discuss reorganization plans. He wrote to Hubert E. Teschemacher, an executive committee member since 1883, that in his judgment there were two courses which the association might pursue. One proposal included the formation of a small association under a binding agreement of the members to contribute funds for detective work. This would necessitate an approval of the action considered at the meetings in September and November. The other plan would be to give up all detective and inspection work in the territory but to designate association agents for railroad centers in accordance with the arrangement adopted by the one hundred and fifty ranchers during the previous shipping season. Adams was convinced that few would agree to sign the commitment adopted in November guaranteeing to pay all dues and assessments of the association. Furthermore, he observed that local associations were being organized throughout the territory on a successful basis to continue the detective work. Adams therefore concluded that the second alternative was the better.

I feel quite sure [he wrote] that one plan will lead to failure and gradual dissolution, while the other will probably increase our members, restore something like harmony in our ranks, and perhaps lead to more effective organization in the future. I am very anxious for the association to be kept together. . . . Important amendments to the present stock laws are evidently necessary and I think the Association can probably suggest such amendments.⁵⁸

In summarizing the achievements for 1888-89 at the spring session, the secretary admitted that no detective or inspection work had been done and that the primary function of the executive committee had been the liquidation of debts. These had been paid, and should the association now decide to dissolve it could at least "retire honorably from the field." The secretary did urge the continuance of the organization and pointed out that, when inspections outside the territory had been abandoned so abruptly by the commissioners, the creation of the "special inspection fund" for this purpose on the basis of "no money, no inspection" met with tremendous success. The secretary now revealed to the members that he thought this slogan contained an underlying principle upon which the association

⁵⁸ Adams to Teschemacher, Mar. 12, 1889.

could be reorganized should members consider it necessary. After a prolonged and agitated discussion at the annual meeting of 1889, the members agreed upon an assessment sufficient to inspect all cattle from the western range to eastern points with the understanding that inspectors report only the brands of those who had paid the assessment.⁵⁹ At the close of the meeting the executive committee voted to rehire inspectors at Chicago, Saint Paul, and Omaha and to keep the contingent inspection fund separate from the general funds of the association. It was agreed that an assessment of 1½ cents a head would be necessary to finance the program.⁶⁰ Adams was convinced that the association was now in a stronger position than it had been in several years. He was content to concentrate on inspections⁶¹ and was "convinced that detective work on the range must be carried on by combinations in the various localities. . . . One of the best plans is to offer large rewards for the conviction of cattle thieves. Then, if a conviction is secured, the combination could 'chip in' and pay the reward, but as a rule the thieves will be scared off, and stockmen can gain their point without going to the trouble of prosecuting."⁶²

The secretary now notified Frank Brainard in Chicago, who had worked for those cattlemen who had subscribed funds during the season of 1888, that he was again an association inspector. He explained to Brainard:

I will send you a complete list of the brands and it is distinctly understood that no other brands are to be reported. The brands now in your possession, and which were forwarded to you by the "Special Inspection Committee" late last year must be returned either to them or to us at once, as we do not want to have any misunderstanding in this matter.

We depend absolutely for the success in our work upon your willingness to *adhere strictly* to this rule of *not advising any stockmen of strays* found in any shipment *unless he has paid his dues* and assessments to the association.⁶³

From C. L. Talbot in Omaha he requested the usual list of strays found but instructed him not to attempt to identify any owners of the brands. Notification of owners would be made from the Cheyenne office if they were entitled to that information from the association.⁶⁴

Further action was stimulated at the 1889 spring meeting when the stockgrowers instructed the legislative committee to draft legislation bolstering the livestock commission and placing it on a sound financial basis. The cattlemen in the territorial assembly of 1890 made two significant achievements. Many of the stock laws which the assembly of 1888 had hastily repealed were restored to the statute books, and provisions were made for the revision and codification for all stock legislation of the territorial period. An immediate appropriation of \$10,000 was granted the commission and continuous financial support from the government guaranteed whereby the needs of the commission would be annually estimated and reported to the governor who could recommend a legislative appropriation.⁶⁵

At a meeting of the executive committee of the Wyoming association in March 1890, it was proposed that, in view of this financial arrangement, all cattle inspection at railroad points outside the territory should become the responsibility of the livestock commission. The commissioners agreed to retain the inspectors which the association had employed in 1889 and to take over the horses and saddles used by these men in return for \$315 deposited in the association's treasury. Some executive committeemen once more doubted the necessity for the association, but it was understood that the organization would maintain an office in Cheyenne for the secretary and veterinarian. No more assessments were to be levied.⁶⁶

In the spring of 1890, when the members assembled for the annual meeting, all knew that the rôle of the association had changed. No membership figures were announced. The secretary inquired, "Shall the organization be maintained?" After the assembled stockmen debated the question at length, they resolved to continue the association. Babbitt, the association's presi-

⁵⁹ Proceedings of the Annual Meetings, 1884-1899, 115.

⁶⁰ Executive Committee Minute Book, Apr. 4, 1889, 87.

⁶¹ Adams to B. B. Brooks, Dec. 13, 1888; Adams to W. J. Clark, Apr. 4, 1889.

⁶² Adams to R. H. Hall, Apr. 4, 1889.

⁶³ Adams to Frank Brainard, Apr. 5, 1889.

⁶⁴ Adams to Brainard, Apr. 22, 1889.

⁶⁵ Session Laws, Eleventh Legislative Assembly, 1890, ch. 37, 51-61; ch. 53, 93-100.

⁶⁶ Executive Committee Minute Book, Mar. 29-31, 1890.

dent, had died in the summer of 1889, and the new president chosen at this session, John Clay, Jr., assured the members:

There is going to be but very little work for the association during the next year, and my duties will not be very cumbersome. Whatever those duties are you may be certain that I am going to be in the front and do the best I can for the stock interests of this territory.⁶⁷

The influence and activities of the Wyoming association had slowly but steadily diminished since the disastrous winter of 1886-87. By 1890 the organization had hit rock bottom. As the territorial period came to a close the association leaders remembered the days when their member-

⁶⁷ Proceedings of the Annual Meetings, 1884-1899, 120. There was only one meeting of the executive committee during 1891. This was at the time of the annual meeting when salaries of \$100 a month were voted the veterinarian and secretary. The Executive Committee Minute Book, 1885-1911, 120, says: "No meeting of the Executive Committee held in 1892."

ship in Wyoming, Montana, Dakota, and Colorado exceeded 450, when the organization operated on an annual budget of \$50,000 and maintained an active detective bureau and inspection system. The association's voice had been the dominant one in territorial politics, and its will had been the law in Wyoming. Time had wrought many changes. The cattlemen's organization assumed a somewhat different rôle with the coming of statehood. Its political activities were curtailed, and many of the functions it had performed were assumed by agencies of the State. But the association did not cease to exist. With its modified organization, the stockgrowers' association has continuously been recognized as a powerful bloc concerned with the economic and social well-being of the Wyoming ranching interests. The years of temporary decline which it experienced in the last half of the 1880s were typical of all cattlemen's organizations on the northern High Plains in those years.

NEWS NOTES AND COMMENTS

FELLOWSHIPS IN ECONOMIC HISTORY

The Committee on Research in Economic History of the Social Science Research Council has announced the establishment of national fellowships in economic history for the academic years 1947-48, 1948-49, and 1949-50. Graduate students in the United States and Canada who have completed at least one full year of graduate study are eligible, and such students must be preparing or planning to prepare doctoral dissertations upon some significant aspect of one of the fields embraced in the Committee's research program which was published in the *Journal of Economic History*, 4:49-72 (1944).

Details concerning these fellowships are provided in a circular which may be secured from Professor Arthur H. Cole, Box 37, Cambridge 38, Massachusetts. Application forms are supplied by the Fellowship Secretary, Social Science Research Council, 230 Park Avenue, New York 17, New York.

HONOR AWARDS

The first Honor Awards ceremony for distinguished service, superior service, and length of service in the U. S. Department of Agriculture was held in Washington, D. C., on November 12, 1947. The list of those honored on this occasion includes five men who have long been members of the Agricultural History Society.

Dr. James F. Couch of the Bureau of Agricultural and Industrial Chemistry, Wyndmoor, Pennsylvania, received a distinguished service award "For research on the utilization of constituents of agricultural commodities which led to the discovery that rutin is an active agent in reducing fragility and other capillary disorders in man."

Dr. M. L. Wilson of the Extension Service received a distinguished service award "For his leadership in pioneering ideas and in developing programs that have greatly improved farming methods, encouraged democratic group action, and enriched the qualities of rural life."

Mr. Martin R. Cooper and Dr. Sherman E. Johnson of the Bureau of Agricultural Economics received superior service awards. Mr. Cooper's award was for his contributions to the wartime programs in the field of farm labor, and Dr. Johnson's for his contribution to American food production during the war by assisting in establishing agricultural production goals based upon realistic appraisals of production capacity.

Mr. Charles E. Gage of the Production and Marketing Administration was among those who received a length of service award for forty or more years of service.

CARRIER HONORED

Mr. Lyman Carrier, a founder and the second president of the Agricultural History Society, retired in

October 31, 1947, after 12 years as head of the Soil Conservation Service in Virginia. On this occasion the Virginia employees of the service honored him at a dinner at the Hotel Patrick Henry in Roanoke, Virginia. An article in the *Roanoke Times* for November 2, 1947 includes details concerning Mr. Carrier's work in Virginia.

U.S.D.A. WAR RECORDS MONOGRAPHS

The U. S. Department of Agriculture, as part of the Government-wide project to record the history of the Government's activities in World War II, is issuing a series of monographs designed to present the wartime changes in various sectors of agriculture. These accounts are being issued as *War Records Monographs* under the direction of the Bureau of Agricultural Economics. Six monographs, which are available on application to the Division of Economic Information, U. S. Bureau of Agricultural Economics, Washington 25, D. C., have been released as follows: *Farm Machinery and Equipment*, by Erling Hole; *Soil Conservation During the War*, by George W. Collier; *Sugar During World War II*, by Roy A. Ballinger; *War Food Order 135, Veterans' Preference for New Farm Machinery and Equipment*, by F. M. Johnson; *Acquisition and Use of Land for Military and War Production Purposes, World War II*, by Alvin T. M. Lee; and *Fats and Oils in World War II: Production and Price-Supporting Programs*, by Robert M. Walsh.—Wayne D. Rasmussen.

PASSENGER PIGEON MEMORIAL

A memorial to the passenger pigeon was dedicated and unveiled in Reservoir Park, Pigeon Hills, Penn Township, York County, Hanover, Pennsylvania, on October 12, 1947. The souvenir program of the dedication issued by the Hanover Chamber of Commerce includes a short article by E. H. Blettner on "The Passenger Pigeon."

RURAL MUSEUM AT STOCKPORT, IOWA

The *Des Moines Sunday Register* for January 4, 1948 contains an article by George Shane captioned "Brothers Build Rural Museum of Early Iowana." It describes the rural museum established by John and Arthur Morris in a wooded section of their farm, 3½ miles northeast of Stockport, Iowa.

MENDEL MUSEUM

The Washington, D. C., *Sunday Star Pictorial Magazine*, February 1, 1948, includes an article by Rebecca Marston entitled "Museum to Mendel." It describes the Mendel Museum established at Mary Washington College, Fredericksburg, Virginia, by Dr. Hugo Iltis, professor of biology there and internationally known biographer of his compatriot, Gregor Mendel.

NEW MEMBERS

The following individuals have recently been added to the Agricultural History Society's membership: Professor Ernest L. Anthony, Dean, School of Agriculture, Michigan State College, East Lansing; Professor W. V. Badger, Department of History, McMurry College, Abilene, Texas; Dean I. L. Baldwin, College of Agriculture, University of Wisconsin; Miss Phyllis S. Everhart, Department of Geography, University of Maryland, College Park; Dr. E. Louise Pepper, Food Research Institute, Stanford University, California (a renewal after service overseas); Professor Frank S. Scott, Jr., Department of Agriculture, Stephen F. Austin State Teachers College, Nacogdoches, Texas; Mr. James Thin, university bookseller, Edinburgh, Scotland; and Mr. A. L. Ward, National Cottonseed Products Association, Dallas, Texas.

ACTIVITIES OF MEMBERS

Dr. Hugo W. Alberts has completed his assignment as agricultural attaché at the American Embassy, Quito, Ecuador.

Dr. Russell H. Anderson, director of the Western Reserve Historical Society, Cleveland, Ohio, was host to the Agricultural History Society when it held its literary session in the library of his institution on December 27, 1947. The Western Reserve Historical Society is a main depository of sources on the Shakers, and Dr. Anderson is investigating their agricultural contributions.

Professor William D. Barns, West Virginia University, Morgantown, has inaugurated a course on the history of American agriculture for juniors and seniors. An article by Dr. Barns on "The Influence of the West Virginia Grange upon Public Agricultural Education of College Grade, 1873-1914" appeared in *West Virginia History*, 9:128-157 (January 1948).

Professor Luther B. Bohanan, University of Maryland, College Park, is continuing his study of the history of tenancy in Maryland and adjacent areas.

Professor James C. Bonner, Georgia State College for Women, Milledgeville, is preparing a volume on the agricultural history of the Southeastern States with special emphasis on Georgia during the years, 1820-1860.

Dr. Herbert O. Brayer of the Western Range Cattle Industry Study, Denver, Colorado, presented a paper on "British Influence in the Western Range Cattle Industry, 1870-1900" at a session of the Mississippi Valley Historical Association at Rock Island, Illinois, on April 24, 1948.

Mr. Cornelius O. Cathey has completed a doctoral dissertation on "Agricultural Development in Antebellum North Carolina" under the direction of Professor Fletcher M. Green at the University of North Carolina.

Professor E. Merton Coulter's book, *The South during Reconstruction, 1865-1877*, was published by the Louisiana State University Press late in 1947. It is volume 8 of the 10-volume cooperative *History of the South* which is being edited by Professor Wendell H. Stephenson, Tulane University, and Professor E. Merton Coulter, University of Georgia, both former presidents of the Agricultural History Society. In the volume published the emphasis is on the conditions and attitudes of the people in the South during Reconstruction.

Professor Richard Osborn Cummings, Department of History, University of California, Los Angeles, has completed a monograph on the early history of the ice industry in the United States.

Dr. Clarence H. Danhof of the School of Public and International Affairs at Princeton University is doing research on the development of the agricultural implement industry from the blacksmith to the integrated corporation.

Professor Robert G. Dunbar is organizing a course on the history of agriculture in the department of history at Montana State College, Bozeman.

Miss Phyllis S. Everhart, a graduate student at the University of Maryland, is making a special study of the geographical factors influencing settlement on the American frontier.

Mr. Robert W. Harrison and Mr. Walter M. Kollmorgen have recently published the following articles: "Drainage Reclamations in the Coastal Marshlands of the Mississippi River Delta," *Louisiana Historical Quarterly*, fall 1947, and "Land Reclamation in Arkansas under the Swamp Land Grants of 1850," *Arkansas Historical Quarterly*, spring 1948.

Professors John D. Hicks and Theodore Saloutos of the history departments of the University of California, the former at Berkeley and the latter at Los Angeles, are working on a volume to be entitled *Agricultural Discontent in the Western Middle West, 1900-1939*.

Professor Albert V. House, Jr., Wilson Teachers College, Washington, D. C., is completing a study of the rice industry in the South Carolina region. Although the Hugh Fraser Grant Plantation Journal is the starting point, considerable attention is being given to the rice factor.

Mr. James C. Howgate, bookseller, 128 South Church Street, Schenectady 5, New York, is preparing a list of early English and American publications on agriculture which he has available. The list will include a number of titles on water conservation and land use. He also has a large supply of out-of-print U. S. Department of Agriculture publications.

Dr. Herbert A. Kellar's presidential address to the Mississippi Valley Historical Association on April 24, 1947 was published under the title, "The Historian and Life," in the *Mississippi Valley Historical Review*, 34:3-36 (June 1947).

The study of "Food Control During Forty-six Centuries: A Contribution to the History of Price Fixing" which Miss Mary G. Lacy, now of Wytheville, Virginia,

originally presented at a meeting of the Agricultural History Society on March 10, 1922 was quoted at length at the Congressional hearings on the proposed resumption of meat rationing in February 1948.

Dr. Thomas P. Martin of the Library of Congress has been instrumental in organizing the Cotton Textile Business History Group. Its members are interested in extending the study of the history of the cotton textile industry and its ramifications.

Professor J. Orin Oliphant of Bucknell University, Lewisburg, Pennsylvania, has an article on "The Cattle Trade Through Snoqualmie Pass" in the *Pacific Northwest Quarterly*, 38:193-213 (July 1947). He presented a paper on "Oregon Cattlemen and the Indian Reservations" at a session of the Mississippi Valley Historical Association at Rock Island, Illinois, on April 24, 1948.

Professor George C. Osborn has resigned from Memphis State College and accepted a position at the University of Florida, Gainesville.

Dr. Arthur G. Peterson of the U. S. Department of Defense has left Washington, D. C., for a 1-year assignment with the National Economic Board in Korea as economic adviser on food and agriculture.

Mr. E. Parmalee Prentice of New York City and Williamstown, Massachusetts, has published privately a volume entitled *Progress: An Episode in the History of Hunger?* (1947).

Mr. Wayne D. Rasmussen of the U. S. Bureau of Agricultural Economics is doing research on the history of United States plant explorers in South America during the nineteenth century.

Mr. J. M. Robinson has completed *An Agricultural History of North Carolina* which is to be published in April or early May 1948 by the North Carolina Department of Agriculture, Raleigh. It deals mainly with the influence of the Department on the agricultural economy of the State since 1877.

Miss Caroline B. Sherman's 2-page *Selected Rural Fiction in 1947* has been issued by the U. S. Bureau of Agricultural Economics.

Dr. Henry C. Taylor of the Farm Foundation, Washington Research office, is continuing his work on the history of agricultural economics.

Dr. J. Allen Tower of Birmingham-Southern College has a Julius Rosenwald Fellowship and is devoting his sabbatical leave to research on the geography of Alabama. His article on "Alabama's Shifting Cotton Belt" appeared in the new quarterly, the *Alabama Review*, January 1948. He has completed an article on "Cotton Changes in Alabama, 1879-1946" for *Economic Geography* and has other articles on related subjects in preparation.

Professor Charles W. Turner of Washington and Lee University is investigating the activities of Virginia agricultural societies in the pre-Civil War years.

Director H. L. Walster of the North Dakota Agricultural Experiment Station at Fargo is currently preparing a history of all the flax investigations of the North Dakota Agricultural Experiment Station and its cooperating agencies from 1890 to date.

ultural
length
sump-

ngress
Textile
rested
on ter

ersity,
Cattle
North-
sented
Reser-
torical
1948
Mem-
e Uni-

ment of
assign-
area as

ty and
privately
History

reau of
history
merica

cultural
shed in
Depart-
y with
ultural

Rural
reau of

Wash-
on the

College
ing his
of Ala-
Cotton
Alabama
article
6" for
related

and Lee
Virginia

a Agri-
tly pre-
of the
on and